



**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

**FILED**

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**A2301015**

In the Matter of the Application of San Pablo Bay Pipeline Company LLC (PLC-29) for Authority to Increase Rates for Its Crude Oil Pipeline Services Pursuant to Public Utilities Code Sections 454 and 455.3.

Application No.

**APPLICATION**

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Attorneys for San Pablo Bay Pipeline  
Company LLC

Dated: January 27, 2023

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

In the Matter of the Application of San Pablo Bay Pipeline Company LLC (PLC-29) for Authority to Increase Rates for Its Crude Oil Pipeline Services Pursuant to Public Utilities Code Sections 454 and 455.3.

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**APPLICATION**

Pursuant to Section 455.3 of the California Public Utilities Code<sup>1</sup> and in accordance with Rules 2.1, 2.2, 3.2, and 7 of the Commission’s Rules of Practice and Procedure, San Pablo Bay Pipeline Company LLC (“SPBPC” or “Applicant”) respectfully requests that the California Public Utilities Commission (“Commission”) authorize SPBPC to increase the rates that it charges for transportation of crude petroleum products by 10 percent effective March 1, 2023, subject to refund.<sup>2</sup> Section 455.3 authorizes an oil pipeline to increase its rates by up to 10 percent upon providing 30 days’ notice and without the need for prior Commission approval, provided that the increase remains subject to retroactive Commission adjustment and refund with interest, as appropriate.

Given required and proper notice to its shippers, SPBPC proposes to increase each of the individual rates on its system by 10 percent thereby increasing its current average transportation rate from \$1.771 /bbl. to \$1.948/bbl., resulting in an estimated increase in annual

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<sup>1</sup> All statutory references are to the California Public Utilities Code unless otherwise noted.

<sup>2</sup> The SPBPC pipeline system that is the subject of the requested rate increases is a 265-mile-long oil pipeline transporting heated crude oil from San Joaquin Valley oil fields to Bay Area refineries, providing public utility service subject to Commission jurisdiction.



revenue of approximately \$3.95 million. SPBPC requests that the subject rate increase become effective March 1, 2023.

Pursuant to Section 454, SPBPC further respectfully requests that the Commission authorize Crimson to increase the rates it charges for its intrastate crude oil transportation services by an aggregate total of 35.9 percent. Crimson is seeking the subject rate increases in order to recover its Commission-jurisdictional cost of service given current rates and throughput levels. With respect to its request for an aggregate rate increase of 35.9 percent, Crimson requests that it become effective the first day of the month following the Commission's issuance of a decision approving any portion of the requested, aggregate rate increase of 35.9 percent that is in excess of the 10 percent rate increase implemented pursuant to Section 455.3.

Pursuant to the provisions of Section 455.3(b)(5), Crimson requests that the Commission authorize Crimson to retroactively recover the difference between the rates in effect as of March 1, 2023 and the rates ultimately approved by the Commission in the subject proceeding. In conjunction with its request for Commission authorization of retroactive rate recovery pursuant to Section 455.3(b)(5), Crimson asks the Commission to authorize establishment of a memorandum account, effective March 1, 2023, for the specific purpose of recording the difference in revenue collected under rates in effect as of March 1, 2023 and revenue collected under the rates ultimately approved by the Commission for which Crimson seeks retroactive recovery..

## **I. BACKGROUND**

### **1. Applicant Information Required by Rule 2.1(a)**

Applicant SPBPC is a California limited partnership. Its principal place of business is 3760 Kilroy Airport Way, Suite 300, Long Beach, California 90806; its telephone number is (562) 285-4100. Its general partner is Crimson Pipeline, LLC, which is wholly owned

by Crimson Midstream Operating, LLC. Crimson Midstream Operating, LLC is wholly owned by Crimson Midstream Holdings, LLC. Crimson Midstream Holdings, LLC is privately held.<sup>3</sup>

**2. Correspondence and Communication Information Required by Rule 2.1(b)**

Correspondence and communications concerning this Application should be directed to the following Crimson representative:

James D. Squeri  
Downey Brand LLP  
455 Market Street, Suite 1500  
San Francisco, CA 94105  
Telephone: (415) 848-4831  
E-mail: [jsqueri@downeybrand.com](mailto:jsqueri@downeybrand.com)

**3. Organization and Qualification to Transact Business Documents Required by Rule 2.2**

Per Rule 2.2 of the Commission's Rules of Practice and Procedure, Crimson's Certificate of Status as a California Limited Partnership in Good Standing is included as Exhibit A hereto.

**4. Information Required by Rule 3.2**

**A. Balance Sheet and Income Statement:**

Financial statements, including the most recently available balance sheet and income statement for SPBPC, are attached as Exhibit B hereto.

**B. Statement of Presently Effective and Proposed Rates:**

Present and proposed rates for the SPBPC pipeline reflecting the 10 percent increase in rates implemented pursuant to Section 455.3 are reflected in Exhibit C.

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<sup>3</sup> D. 20-01-013 issued January 16, 2020 authorized the transfer of control of CPMI from John Grier to CGI Crimson Holdings, LLC.

**C. General Description of Crimson's Property and Equipment:**

Applicant SPBPC has been formed as a limited liability company for the specific purpose of owning, operating, and managing smaller, marginal, or idle pipelines and providing pipeline transportation services to the public.

The San Joaquin Valley Pipeline System owned and operated by SPBPC consists of a 265-mile-long oil pipeline transporting heated crude oil from San Joaquin Valley ("SJV") oil fields to Bay Area refineries. As a heated and batched pipeline, SPBPC can transport in a neat (unblended) form the heavy crude that is the majority of SJV production.

**II. JUSTIFICATION FOR REQUESTED RATE INCREASE**

Exhibit D hereto, the Declaration of Michael J. Webb, sets forth the basis, as well as justification, for both SPBPC's Section 455.3 rate increase request and its Section 454 request for an aggregate rate increase of 33.9 percent., including the effects of declining throughput as well as a showing of SPBPC's achieved returns assuming implementation of the 10% rate increase and the aggregate rate increase of 33.9 percent. The proposed increases are reasonable given that even with the increase in revenues anticipated by this filing SPBPC will fail to realize the reasonable return on its utility investment to which it is entitled by law.

**III. INFORMATION REQUIRED FOR RULE 2.1(C) AND RULE 7 COMPLIANCE**

The subject application seeks authorization, pursuant to Section 455.3 of the Public Utilities Code, for SPBPC to increase the rates it charges for intrastate public utility pipeline services by ten percent and, pursuant to Section 454, to increase such rates for its pipeline transportation services by an aggregate of 33.9 percent.

SPBPC has provided all shippers affected by the proposed rate increases with copies of the subject application.

**A. Proposed Category:** SPBPC proposes that the application be treated as a

“ratesetting” proceeding.

**B. Need for Hearing:** Hearings will be needed on this application only to the extent a material issue of fact is raised by timely protest. Accordingly, SPBPC does not know whether a hearing will be required. If no hearing is required, SPBPC would request that an ex parte decision approving the rate increase request be issued by the Commission by year end 2022. If a hearing is required, SPBPC proposes a schedule as set forth below.

**C. Issues Requiring Consideration:** The issues raised by this application are as follows: (1) whether SPBPC’s proposal to increase rates by 10% on its pipeline is just and reasonable; and (2) whether SPBPC’s proposal to increase rates by an aggregated 33.9 percent on its pipeline is just and reasonable.

**D. Proposed Schedule:** SPBPC proposes the following schedule:

Application Filed	January 27, 2023
Notice in Daily Calendar	TBD by CPUC Docket Office
Protests Due	30 Days After Daily Calendar Notice
Prehearing Conference	March, 2023
Applicant’s Opening Testimony	June, 2023
Intervenor Testimony Due	July, 2023
Applicant’s Rebuttal Testimony	August, 2023
Hearings	September, 2023
Concurrent Opening Briefs	October, 2023
Concurrent Reply Briefs	November, 2023
ALJ Draft Decision	February, 2024
Commission Decision	March, 2024

#### IV. **EXHIBITS**

As required by Commission Rules 15, 16, and 23, SPBPC provides the following information and exhibits:

Exhibit A	SPBPC Certificate of Limited Partnership
Exhibit B	SPBPC Financial Statements
Exhibit C	Current and Proposed Rates
Exhibit D	Declaration in Support of Rate Increase

**WHEREFORE**, SPBPC requests:

1. That the Commission issue an opinion and order approving the requested increases in SPBPC's crude oil pipeline tariff rates as quickly as is practicable; and
2. That the Commission grant such other and further relief as shall be just and proper. SPBPC is prepared to review the analysis and forecasts supporting this filing with Staff upon request.

Respectfully submitted this 27th day of January, 2023 at San Francisco, California.

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By /s/ James D. Squeri  
James D. Squeri

Attorneys for San Pablo Bay Pipeline  
Company LLC

**VERIFICATION OF COUNSEL**

I, James D. Squeri, declare:

I am an attorney at law duly admitted and licensed to practice before all courts of this state and I have my professional office at Downey Brand LLP, 455 Market Street, Suite 1500, San Francisco, California 94105.

I am an attorney for Applicant, San Pablo Bay Pipeline Company LLC, in the above-entitled matter.

No officer of San Pablo Bay Pipeline Company LLC is present in the county in which I have my office and for that reason I am making this verification on behalf of San Pablo Bay Pipeline Company LLC .

I have read the foregoing Application and know its contents thereof.

I am informed and believe that the matters stated therein are true and, on that ground, I allege that the matters stated therein are true.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed at San Francisco, California on this 27th day of January, 2023.

/s/ James D. Squeri  
James D. Squeri

EXHIBIT A

SPBPC CERTIFICATE OF GOOD STANDING



## Secretary of State Certificate of Status

I, SHIRLEY N. WEBER, PH.D., California Secretary of State, hereby certify:

<b>Entity Name:</b>	SAN PABLO BAY PIPELINE COMPANY LLC
<b>Entity No.:</b>	200402410113
<b>Registration Date:</b>	01/21/2004
<b>Entity Type:</b>	Limited Liability Company - Out of State
<b>Formed In:</b>	DELAWARE
<b>Status:</b>	Active

The above referenced entity is active on the Secretary of State's records and is qualified to transact intrastate business in California.

This certificate relates to the status of the entity on the Secretary of State's records as of the date of this certificate and does not reflect documents that are pending review or other events that may impact status.

No information is available from this office regarding the financial condition, status of licenses, if any, business activities or practices of the entity.



**IN WITNESS WHEREOF**, I execute this certificate and affix the Great Seal of the State of California this day of January 20, 2023.

**SHIRLEY N. WEBER, PH.D.**  
Secretary of State

**Certificate No.:** 075292734

To verify the issuance of this Certificate, use the Certificate No. above with the Secretary of State Certification Verification Search available at [bizfileOnline.sos.ca.gov](http://bizfileOnline.sos.ca.gov).



EXHIBIT B

SPBPC FINANCIAL STATEMENTS

Consolidated CorEnergy  
Summary of All Units  
For the Twelve Months Ending Saturday, December 31, 2022

	<u>207</u>
	<u>San Pablo Bay</u>
	<u>Pipeline Company, LLC</u>
<b>ASSETS</b>	
Current Assets	
Cash	\$ (743,606)
Accounts Receivable - Trade	5,742,694
Inventory	46,190
Prepaid expenses and other Assets	427,512
Total Current Assets	<u>5,472,790</u>
Fixed Assets	
Property and Equipment	234,488,135
Property and Equipment (Accum. Dep.)	(18,406,746)
Total Fixed Assets	<u>216,081,389</u>
Other Assets	
Intercompany Receivables	3,822,784
Total Other Assets	<u>3,822,784</u>
<b>TOTAL ASSETS</b>	<b><u>\$ 225,376,963</u></b>
<b>LIABILITIES &amp; EQUITY</b>	
Liabilities	
AP and other accrued liabilities	\$ 4,629,317
Total Accounts Payable	<u>4,629,317</u>
Other Current Liabilities	
Unearned Revenue	203,725
Total Other Current Liabilities	<u>203,725</u>
Long-Term Liabilities	
Intercompany Payables	660,953
Total Long-Term Liabilities	<u>660,953</u>
Total Liabilities	<u>5,493,995</u>
Equity	
Additional Paid-in Capital	297,388,789
Accumulated Retained Earnings	(88,549,294)
Net Income (Loss)	11,043,474
Total Equity	<u>219,882,968</u>
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<b><u>\$ 225,376,963</u></b>
<i>Difference</i>	<i>0.00</i>

Consolidated CorEnergy  
Summary of All Units  
For the Twelve Months Ending Saturday, December 31, 2022

	207
	San Pablo Bay
	Pipeline Company, LLC
<b>Revenue</b>	
Transportation	\$ 56,710,854
Other	82,307
<b>Total Revenue</b>	<b>56,793,161</b>
<b>Expenses</b>	
<b>Operating Expenses</b>	
Salaries & Benefits Opex	5,954,858
Materials and Supplies	164,746
Field Office	122,254
Asset Maintenance	1,925,160
Outside Services	2,141,919
Utilities and Power	10,996,703
Right of Way	213,375
Regulatory, Environmental, and Sa	727,015
Insurance and Bonds	2,553,415
Taxes	1,574,584
Other Expenses	1,629,714
<b>Total Operating Expenses</b>	<b>28,003,744</b>
<b>SG&amp;A Expenses</b>	
Salaries & Benefits - G&A	4,785,425
Professional Services	1,854,778
Director's Fees	162,090
Other expenses - G&A	1,102,111
<b>Total SG&amp;A Expenses</b>	<b>7,904,404</b>
<b>Total Expenses</b>	<b>35,908,148</b>
<b>Net Ordinary Income</b>	<b>\$ 20,885,013</b>
<b>Other (Income)/Expense</b>	
Depreciation Expense	9,851,194
Other Income/Expense	(9,655)
<b>Total Other Income/Expense</b>	<b>9,841,539</b>
<b>Net Income</b>	<b>\$ 11,043,474</b>

## EXHIBIT C

### CURRENT AND PROPOSED RATES

# San Pablo Bay Pipeline Company LLC

10% increase; rates in cents per barrel

Current Tariff	ROUTE	ORIGIN POINTS IN CALIFORNIA	DESTINATION POINTS IN CALIFORNIA	Current Rate (cpb)	Proposed Rate (cpb)	Increase %
<b>CPUC 2.14.0</b>		Coalinga Gathering (Includes Mainstate, Pennzler, National, 13D, 25D, and Section 29), Fresno County Coalinga Station (Truck Receipts), Fresno Cty <b>*See Note 1</b>				
	01	Station 36, Kern County	Valero Refinery Interconnect, Contra Costa County	177.10	194.81	10.0%
		Kern River Holdings (Kern River), Kern County Bakersfield Tank Farm (Truck Receipts), Kern Cty <b>*See Note 1</b> Macpherson (Round Mountain), Kern County				
	02	Kern Front, Kern County	Marathon Refinery Interconnect, Contra Costa County	177.10	194.81	10.0%
		North Shafter, Kern County Station 31 (Midway Sunset), Kern County Fairfield (Midway Sunset), Kern County Section 15A (Midway Sunset), Kern County				
	03	Olig Station, Kern County	PBF Refinery Interconnect, Contra Costa County	177.10	194.81	10.0%
		Kernridge Station (Belridge), Kern County Middle Station (Carmaras), Kern County Hopkins South (Belridge), Kern County				
	04	Gottland, Kern County	Valero Refinery Interconnect, Contra Costa County	177.10	194.81	10.0%
	05	Dehy 20 (Belridge), Kern County <b>** See Note 2</b>	Marathon Refinery Interconnect, Contra Costa County	177.10	194.81	10.0%
	06	Coalinga Station (Truck Receipts), Fresno Cty <b>*See Note 1</b>	PBF Refinery Interconnect, Contra Costa County	177.10	194.81	10.0%
	07		Valero Refinery Interconnect, Contra Costa County	177.10	194.81	10.0%
	08	Section 18 (Lost Hills Gathering), Kern County	Marathon Refinery Interconnect, Contra Costa County	177.10	194.81	10.0%
	09	Lost Hills 2 (Lost Hills Gathering), Kern County	PBF Refinery Interconnect, Contra Costa County	177.10	194.81	10.0%
	10	Station 36, Kern County	San Joaquin Refinery, Kern County	37.80	37.80	0.0%
	11		Valero Refinery Interconnect, Contra Costa County	177.10	194.81	10.0%
	12	Olig Station, Kern County <b>***See Note 3</b>	Marathon Refinery Interconnect, Contra Costa County	177.10	194.81	10.0%
	13		PBF Refinery Interconnect, Contra Costa County	177.10	194.81	10.0%
	*NOTE 1	TRUCK RACK UNLOADING CHARGE	Bakersfield and Coalinga	13.40	13.40	0.0%

EXHIBIT D

DECLARATION IN SUPPORTED OF REQUESTED RATE INCREASE

## **Declaration of Michael J. Webb**

### **I. Introduction and Statement of Qualification**

1. My name is Michael J. Webb. I am Vice President with Regulatory Economics Group, LLC (“REG”), a consulting firm with offices in Reston, Virginia and San Francisco, California. My address is 11180 Sunrise Valley Drive, Reston, Virginia 20191. I hold a PhD and MA in Economics from George Mason University and a BA in Economics from American University. I have 25 years of experience in the oil pipeline industry. I have provided testimony before this Commission, the Federal Energy Regulatory Commission (“FERC”), the National Energy Board (Canada), the Canadian Energy Regulator, the Kansas Corporation Commission, the Regulatory Commission of Alaska, the Wyoming Public Service Commission, the Virginia State Corporation Commission, the Railroad Commission of Texas, the American Arbitration Association, the Pennsylvania Public Utilities Commission, the Louisiana Public Utilities Commission, the Court of Chancery of the State of Delaware, and the District Court for the 269<sup>th</sup> District of Texas. In these forums, my testimony has addressed a variety of issues relating to oil pipeline regulation. I have attached my curriculum vitae as Exhibit No. MJW-1.
2. I have been asked by San Pablo Bay Pipeline, L.P. (“San Pablo Bay”) to calculate a Cost of Service and Achieved Return figures. The purpose of these findings is to demonstrate to the California Public Utilities Commission (“CPUC” or “Commission”) that its 10% rate increase filed on January 27, filed with my statement, are reasonable. An Achieved Return figure provides a way to calculate the return which a utility, such as San Pablo Bay, will earn at a given rate level. Similarly, a Cost of Service calculation demonstrates the

imbalance between operating expenses and rate base elements. In the next section of my statement, I will present a summary of the elements used to calculate these figures. I will then present a Cost of Service (Exhibit No. MJW-3) and three Achieved Return figures (Exhibit No. MJW-2). The first will present the Achieved Return resulting from the rates that were in place prior to any increase. The second will present the Achieved Return that would result from taking the full cost-of-service increase that San Pablo Bay proposes in the subject application filed on January 27, 2023. Finally, I will present the Achieved Return figure that will result from the 10% increase to the current rates filed with this statement. In Section III of my statement, I will present a calculation of the cost-of-capital. Comparing this cost-of-capital to the Achieved Return resulting from San Pablo Bay's rate increases demonstrates that San Pablo Bay's rate increases fall within the zone of reasonableness.

3. I rely on data provided to me by San Pablo Bay for cost information that I incorporated into my calculation. I made adjustments over the course of preparing an acceptable Base Period that I explain in the relevant sections.



## **II. Cost of Service and Achieved Return Calculation**

4. An Achieved Return calculation (Exhibit No. MJW-2) begins with the revenue generated by a given set of rates, subtracts costs of providing service, and divides the residual by the cost of the assets used to provide service. The figure, expressed as a percentage, is compared against various capital market metrics for comparable companies to determine if it is in the zone of reasonableness, presuming one is setting a cost-based rate.<sup>1</sup> To the extent the Achieved Return figure generated by current rates is significantly below the capital market metrics, it is appropriate to allow the utility to raise its rates to a level that will generate an Achieved Return aligned with these market metrics.
5. In preparing my Achieved Return calculations, I have relied upon a few basic principles. First, I began with actual data from the books and records of the company in 2022, which is the Base Period. I removed any abnormal items and replaced these with normalized figures. Next, to the extent there was evidence that these figures will change with known and measurable accuracy in the Test Period (2023), I adjusted the Base Period figures to reflect this information. In addition, it is my understanding that this agency, like most regulatory agencies, bases such calculations on original cost. Consequently, as I discuss in subsection (b) below, I have obtained the original cost figures from San Pablo Bay. In the subsections below, I will discuss the various cost elements of the Achieved Return calculation. I will then discuss the calculation of revenue from which these costs should

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<sup>1</sup> Section III will discuss in detail the process of balancing investors' interests in ensuring the financial integrity of the enterprise with consumers' interest in not paying excessive rates first described in the seminal *US Supreme Court Case FPC v. Hope Natural Gas* 320 US, 591 (1944).

be subtracted and measured against as well as perform a Cost of Service calculation (Exhibit No. MJW-3).

a. Operating Expenses

6. I began my calculation by obtaining operating expenses from 2022 (Base Period) from San Pablo Bay, which are categorized in the Uniform System of Accounts for oil pipelines that I understand to be the convention relied on by the Commission. As shown on Line 20 of Exhibit No. MJW-3, Statement B, San Pablo Bay incurred approximately \$42.7 million of operating expenses in 2022. I worked with San Pablo Bay to identify nonrecurring expenses included in the Base Period and known and measurable changes to operating expense in 2023 (Test Period). These adjustments are shown in Exhibit No. MJW-3, Statement B and represent the changes that San Pablo Bay believes will occur with known and measurable accuracy during the Test Period. I have reviewed these adjustments, and they appear to meet the known and measurable standard and are appropriate for ratemaking. I recommend that Test Period operating expenses of approximately \$50.8 million should be employed in calculating the Achieved Return.
7. I identified two normalizing adjustments necessary to remove non-recurring expenses from the Base Period expenses. This normalizing adjustments are:
  - A \$2,003,599 reduction in account 330 Operating Fuel and Power, to account for the approximately 18% of the barrel-miles on the SPB system being attributed to the KLM system. Upon reaching the end of the KLM pipeline, these barrels continue on the SPB system northward, to the same Bay Area refineries. These KLM shipments however, are covered by the KLM tariff, which is not the subject of this application. Removing

the fuel and power costs associated with these barrels protects shippers on SPB from covering costs which can be attributed to KLM shippers.

- A further \$1,838,649 reduction in account 330 Operating Fuel and Power, to account for the approximately 17% of the barrel-miles on the SPB system being attributed to the increase in volumes caused by the Plains pipeline shutting down. As I describe below, I have removed these volumes as part of a normalizing adjustment. Removing the fuel and power costs associated with these barrels protects shippers from incurring costs attributable to these Plains volumes.
8. These normalizing adjustments implied normalized Base Period operating expenses of approximately \$38.9 million.
9. Next, I identified twelve test period adjustments to account for known and measurable changes. I based these adjustments on budget projections provided by the company. Those adjustments include:
- A \$599,286 increase to account 300 Salaries and Wages, a \$22,337 increase to account 500 Salaries and Wages, and a \$286,627 increase to account 550 Employee Benefits, to reflect merit increases, promotions, filling of other open positions, and removal of capitalized labor,
  - A \$31,480 decrease in account 310 Materials and Supplies and a \$30,399 increase in account 510 Materials and Supplies to reflect a decrease in field office-related supplies,

- A \$3,583,346 increase in account 320 Outside Services and a \$75,149 decrease in account 520 Outside Services to reflect several ILI runs and increases in tank inspections, repairs, and corrosion analysis,
- A further \$5,510,000 increase in account 320 Outside Services to reflect changes in SPB's accounting practices,
- A further \$750,000 increase to account 520 Outside Services, related to rate filing and litigation costs,
- A \$1,794,491 increase to account 330 Operating Fuel and Power to account for increases in power costs caused by increases in natural gas prices, tempered by a reduction in direct natural gas costs due to SPB no longer providing heated service,
- A \$929,512 decrease in Account 340 Oil Losses and Shortages to account for non-recurring losses,
- A \$101,513 increase to account 350 Rentals and a \$77,219 decrease to Account 530 Rentals, to reflect increases in right-of-way costs,
- A \$220,340 increase to account 540 Depreciation and Amortization to reflect depreciation changes and approximately \$6.5 million in carrier property additions in 2022,
- A \$37,812 decrease in account 560 Insurance to reflect slightly lower environmental and pollution insurance, offset by higher automobile insurance,
- A \$53,949 increase in Pipeline Taxes to reflect higher payroll taxes, and

- A \$70,975 decrease to account 390 Other Expenses and a \$89,023 increase to account 520 Other Expenses to reflect slightly higher travel costs, offset by lower accounting system costs.

10. As the above illustrates, categories were both increased and decreased to achieve the most realistic and accurate projection of the Test Period. These test period adjustments combined with the normalizing adjustments yield Test Period operating expenses of \$50.8 million.

b. Calculation of Original Cost Rate Base

11. Rate Base enters the Achieved Return calculation in two ways. First, the depreciation of Rate Base (i.e., recovering the economic cost of investing in assets over the expected life of the assets) is a cost that must be subtracted from revenue. In addition, dividing the residual revenue (after subtraction of operating expenses, depreciation, and other costs) by Rate Base generates the Achieved Return.
12. It is my understanding, that this Commission employs the depreciated original cost approach (“DOC”) for calculating Rate Base. The original cost of the assets calculated under the DOC approach is typically defined as the cost to the first entity to place an asset in public service. I began with the 2005 Rate Base approved by the Commission when San Pablo Bay became a public utility of approximately \$115.8 million and relied on additions and retirements contained in the company books and records (Exhibit MJW-3, Statement E).



c. Depreciation

13. In addition to earning a return on its rate base, San Pablo Bay must recover the costs of the assets in Rate Base over the remaining service life during which these assets are expected to be in operation. A composite depreciation rate of 2.70% was used by San Pablo Bay when calculating these results (Exhibit MJW-3, Workpaper 2). This value is consistent with depreciation rates previously approved by this commission for San Pablo Bay in prior cases.

d. Income Taxes

14. Because San Pablo is not itself a tax paying entity and consistent with precedent at this Commission, I have not included an Income Tax Allowance or any related items (*e.g.*, ADIT) in the Cost of Service calculation.

e. Volume and Revenue

15. Having identified each of the cost elements comprising the Achieved Return calculation, it is necessary to calculate the revenue that San Pablo Bay will earn. San Pablo Bay has advised me that its revenue comes from two sources: collecting tariff rates filed with the Commission for transportation of oil and selling any oil that it receives as part of the Product Loss Allowance ("PLA").<sup>2</sup> Therefore, estimating Test Period is a function of

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<sup>2</sup> It is my understanding that San Pablo Bay management has determined that it is appropriate to include PLA revenue in its achieved return calculation. Since this case involves a change to transportation rates, I believe this choice is conservative, in that it results in lower rates. In my opinion, a theoretical argument exists that transportation revenue should not be offset with PLA revenue.

several variables, including projected volumes, projected oil prices, and realized PLA sales price that Crimson provided to me.

16. To estimate Base Period volume, I began with the actual long-haul volume that San Pablo Bay transported in 2022 of 32,277,728 barrels (see Exhibit No. MJW-3, Workpaper 3, Line 6). Starting in July of 2022, the Plains pipeline temporarily shutdown, and its volumes shifted over to SPB. It is my understanding that Plains has announced that it will restart on February 1, 2023 and that the company has already observed decreased nominations. Further, I have been advised by the company that these barrels exclusively traveled on the line on Station 36 to Cross Valley, which, prior to July, was not moving any volumes. Using this information provided the company, I calculated the total volume on Station 36 to Cross Valley, from July to December 2022, as 4,198,449 barrels. I then removed these Plains barrels as a normalizing adjustment, leaving a Base Period volume of 28,079,279 barrels.
17. To estimate Test Period volumes, I started with the daily throughput estimated by the company for each month of 2023. SPB expects to see 85,881 barrels per day (“bpd”) in January 2023, and 63,477 bpd from February to March 2023. Because the Plains pipeline will return to service on February 1, the figures for January remained elevated over the normal values. To adjust for this, I replaced the January 2023 expected daily throughput with the figure from February. This results in a Test Period throughput of 27,857,610 barrels, as shown in Line 6 of Exhibit No. MJW-3, Workpaper 4. This represents a 0.79% decrease during the Test Period from the Coalinga Station to the Shell and Valero

refineries, and a 0.77% decrease during the Test Period from Station 36 to San Joaquin Refinery.

18. To estimate Test Period PLA revenue, I relied on projections provided to me by San Pablo Bay, which forecast earnings of \$2,818,806. (see Exhibit No. MJW 3, Workpaper 4, Line 9).

f. Achieved Return

19. Exhibit No. MJW-2, Line 22, Column [a] shows the Achieved Return if San Pablo Bay does not raise its rates at all. Under this scenario, San Pablo Bay would earn an Achieved Return on Equity of approximately -11.95%.
20. Exhibit No. MJW-2, Line 22, Column [b] shows the achieved return San Pablo Bay would earn if it raised its current rates by 10% as calculated by their Cost of Service. Under this scenario, San Pablo Bay would earn an Achieved Return on Equity of approximately -4.81%. As shown in Column [c], if San Pablo Bay, receives the full cost-based rate increase, it would earn an Achieved Return of 13.71%.

### III. Cost of Capital

a. Cost-of-Capital Principles

21. *FPC vs. Hope Natural Gas* 320 US, 591 (1944) (hereinafter “*Hope*”) constitutes one of the seminal cases in setting just and reasonable cost-based rates. In relevant part, *Hope* teaches that a rate falls within the zone of reasonableness if it balances the interests of the investor and the consumer. *Hope* goes on to state that:



From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for capital costs of the business... By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and attract capital.

22. *Hope* also teaches that in assessing whether a given rate (or rate increase) achieves the appropriate balance, one must compare the return generated by these rates to the return generated by other firms of similar risk. Typically, this means comparing the achieved return on equity to the return of other publicly traded oil pipeline companies.
23. Calculating the appropriate cost-of-capital involves three key variables: the capital structure (i.e., the ratio of equity to long-term debt), the cost-of-debt, and the cost-of-equity. The combination of these three figures produces a weighted average cost-of-capital. Applying the weighted average cost-of-capital to the rate base produces the total return that the utility requires to provide service.

b. Capital Structure and Cost-of-Debt

24. In important ways, San Pablo Bay differs from other utilities regulated by this Commission. Specifically, San Pablo Bay does not issue long-term debt but relies on its owners as well as variable rate credit facilities for financing. Because these credit facilities differ in fundamental ways from long-term debt, it is inappropriate to incorporate them into the cost-of-capital calculation. Consequently, one could argue that the weighted average cost-of-capital (“WACC”)<sup>3</sup> and the return on equity (“ROE”) should be equivalent. However,

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<sup>3</sup> WACC = (COD × % Debt) + ROE × (1 - % Debt)

shippers may argue that such an approach generates an excessive return, and the Commission may have concerns that such a precedent would provide an incentive for other utilities to reduce their reliance on debt, even if the incurrence of debt is economically efficient. Therefore, I have calculated San Pablo Bay's Achieved Return as if it had 40% long-term debt (i.e., % Debt = 40%). While several of the major publicly traded oil pipeline companies have higher debt percentages, in my opinion it is appropriate to use a lower debt percentage for San Pablo Bay to account for its smaller size and reliance on a small number of producers with declining production and the associated higher level of risk. Not only is this 60/40 equity structure economically sensible, but it has also been approved by this commission in other cases. In Decision 20-11-026, San Pablo Bay's parent company, Crimson California Pipeline, L.P., had their rate increases approved while employing the same models and structure.

25. In addition to a capital structure, it is also necessary to estimate a cost-of-debt ("COD"). The company informs that it believes its debt would be rated no better than single B level. Over the 6-month period ending December 1, 2022, single B bonds have traded with an average yield of 8.80%. (Exhibit No. MJW-3, Workpaper 1, Line 21).

c. Calculating the Return on Equity

26. The two-stage DCF model begins with a group of publicly traded oil pipeline companies known as the proxy group and determines the return investors would earn for each company in the group. Investor return consists of two elements: the yield that they expect to earn through dividends or distributions, and the growth in those dividends or distributions and the impact of that growth on the value of the security.

27. The first stage of the calculation relies on dividends (or distributions) and average unit price. Dividing expected dividends by unit price determines the dividend yield. For example, if the investor purchased a unit for \$10 and this share entitled the investor to \$1.00 of dividends per annum, the dividend yield would be 10%.
28. Analysts also forecast growth in the earnings and dividends and the impact of that growth on price of units. This growth represents the other element of the investors' expected return. If the investor expected the earnings and dividends to grow at 5% annually, the simple "growth" component of the expected equity rate of return would be 5%. I apply the discounted cash flow formula:

$$k = D_1/P_0 + g$$

Where:

$k$  = estimated Equity Rate of Return,

$D_1$  = expected dividend at year end,

$P_0$  = company stock price, and

$g$  = estimate of company's long-run future dividend and earnings growth.

29. As shown at Exhibit No. MJW-3, Workpaper 5, for each company I calculated the yield by dividing the most recent distribution by the respective company's average unit price. Then, I made an adjustment by multiplying the yield by  $(1 + 0.5g)$ . This adjusted yield reflects average growth expected in the distribution during the period of the analysis.
30. Typically, the growth rate used in these proceedings consists of a two-stage weighted growth rate consisting of analysts' forecasts of earnings growth (given a 2/3 weight) and

the projected growth in the gross domestic product (given a 1/3 weight). Consistent with this approach, I weighted by two-thirds Yahoo! Finance earnings per share median growth consensus estimate. Next, I averaged the forecast gross domestic product growth rate and then applied a weight of one-third.

31. I averaged the forecasted long-term gross domestic product growth reported by the following three sources: the U.S. Energy Information Administration's Annual Energy Outlook, the IHS Global Insight's U.S Economy 30-Year Focus, and the Social Security Administration's OASDI Trustees Report.
32. In preparing my return on equity calculations, I relied on a proxy group consisting of the oil pipeline companies shown in the Table 1 below.

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**Table 1**  
**Recommended Proxy Group**

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Magellan Midstream Partners, L.P.

MPLX, L.P.

Enterprise Products Partners, L.P.

Plains All American Pipeline, L.P.

Enbridge

NuStar Energy, L.P.

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33. This proxy group is similar to the proxy group relied on by the Commission in *Crimson California Pipeline* in the recent decisions issued on October 2022 (D.22-10-009).

However, I have removed Shell Midstream and Phillips 66 Partners from the proxy group I used in D.22-10-009, as they are no longer publically traded.

34. Calculating the Return on Equity from the DCF using this proxy group generates a median nominal return on equity of approximately 13.70%, as shown in Exhibit No. MJW-3, Workpaper 5.
35. In addition to the DCF model employed above, San Pablo Bay was compared against the same group of proxy pipelines for a CAPM approach. The formula for the Capital Asset Pricing Model (“CAPM”) is:

$$ER_i = R_f + \beta_i(ER_m - R_f)$$

Where:

$ER_i$  = expected return of investment,

$R_f$  = expected return of investment,

$\beta_i$  = beta of the investment, and

$ER_m$  = expected market return.

36. While DCF uses historical growth rates among the selected proxy companies to calculate a projected ROE, CAPM looks at the risk valuation of a company. The CAPM Cost of Equity for the proxy pipelines ranged from 9.6% to 14.7% and gave a median Size-Adjusted CAPM value of 11.75%. Given the present structure and situation that San Pablo Bay has, if anything this CAPM value understates potential risk. Combining this CAPM value with the previously calculated DCF value results in a ROE Nominal Composite Average of 12.72%.



37. Because San Pablo Bay and its parent company Crimson are significantly smaller and face significantly higher risk than these large, diversified companies, I have added 100 basis points to develop a risk adjusted Return on Equity of 13.72%.

#### **IV. Conclusion**

38. As shown in the Exhibit No. MJW-2, Achieved Return, under its current rates San Pablo Bay will earn an Overall Return on Rate Base of -3.65% in the Test Period; its Achieved Return on Equity will be -11.95%. Raising rates by 10% will allow San Pablo Bay to earn an overall Achieved Return on Rate Base of 0.64% and an Achieved Rate of Return on Equity of -4.81%, both of which are below a reasonable return on equity. If San Pablo Bay earns its allowed return, it will earn an Overall Return on Rate Base of 11.75% in the Test Period; its Achieved Return on Equity will be 13.71%, and it must raise its rates by 35.9%<sup>4</sup>.

The foregoing declaration is submitted under penalty of perjury in accordance with the laws of the State of California.

Dated: January 27, 2023

/s/ Michael J. Webb

Michael J. Webb

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<sup>4</sup> This includes a 36.7% increase on the 20" line to the Shell and Valero refineries, and a 9.5% increase on the line from Station 36 to the San Joaquin Refinery.

**MICHAEL J. WEBB**

*Vice President*

Dr. Webb has more than twenty years of energy industry experience. Dr. Webb has extensive experience in all aspects of pipeline rate regulation at the Federal and State levels, as well as international levels. His testimony, on behalf of investor class was favorably cited in decision of the Delaware Court of Chancery that resulted in a judgement in favor of the class, and damages in excess of \$800 million. He has filed expert testimony in numerous cases involving the calculation of cost-based rates. He has also prepared several applications for authority to charge market-based rates on interstate oil pipelines. He has filed testimony addressing issues of natural gas pipeline ratemaking and has been qualified as an expert in principles of natural gas rate making. He has prepared whitepapers and met with FTC Staff to gain approval for mergers on behalf of oil companies. Dr. Webb holds a PhD in economics from George Mason University in Fairfax, Virginia and has published in the journals *Public Choice* and *Natural Gas & Electricity*. His academic interests include applied microeconomics, industrial organization, and auction theory. He has taught courses in Law and Economics, the Economics of Regulation, and the Economics of Energy at the graduate and undergraduate level.

**Relevant Experience**

**Testimony**

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|----------------|---|
| Jan. 3, 2023   | Submitted an Affidavit on behalf of Phillips 66 Pipeline LLC addressing issues related to cost-of-service calculations including return on equity, capital structure and the application of the FERC's Opinion No. 154-B methodology in Docket No. IS23-92-000. |
| Dec. 23, 2022  | Submitted Rebuttal Testimony on behalf of Crimson California Pipeline L.P. in Docket Nos. A-22-06-017 and A-22-03-013 discussing principles of cost-based ratemaking, and supporting the pipeline's rate increase.  |
| Sept. 13, 2022 | Submitted Direct Testimony on behalf of Crimson California Pipeline L.P. in Docket No. A-22-06-017 discussing principles of cost-based ratemaking, and supporting the pipeline's rate increase.   |

- Aug. 24, 2022 Submitted Verified Statement on behalf of Crimson California Pipeline L.P. in Docket No. A-20-06-010 responding to questions raised by ALJ and supporting the pipeline's rate increase.
- Aug. 6, 2022 Submitted Testimony on behalf of Crimson California Pipeline L.P. in Docket No. A-22-03-013 regarding surcharge to implement AB-864 safety measures.
- Jul. 29, 2022 Submitted Declaration on behalf of San Pablo Bay Pipeline Company and KLM Pipeline Company before the California Public Utilities Commission in addressing the cost of service, cost of capital and achieved return supporting the applicant's rate increase.
- Jun. 30, 2022 Submitted Declaration on behalf of Southern California Pipeline System before the California Public Utilities Commission in addressing the cost of service, cost of capital and achieved return supporting the applicant's rate increase.
- Nov. 19, 2021 Submitted Rebuttal Testimony on behalf of SFPP, L.P. before the California Public Utilities Commission in Docket No. A.21-01-015 addressing issues related to risk, return on equity cost-of-debt and capital structure and cost-allocation.
- Oct. 1, 2021 Submitted Direct Testimony on behalf of SFPP, L.P. before the California Public Utilities Commission in Docket No. A.21-01-015 addressing issues related to risk, return on equity cost-of-debt and capital structure.
- Sep. 20, 2021 Submitted an Affidavit on behalf of Phillips 66 Pipeline LLC addressing issues related to cost-of-service calculations including return on equity, capital structure and the application of the FERC's Opinion No. 154-B methodology.
- Jun. 30, 2021 Submitted Declaration on behalf of KLM Pipeline System before the California Public Utilities Commission in addressing the cost of service, cost of capital and achieved return supporting the applicant's rate increase.
- Jun. 30, 2021 Submitted Declaration on behalf of Southern California Pipeline System before the California Public Utilities Commission in addressing the cost of service, cost of capital and achieved return supporting the applicant's rate increase.



- Jun. 10, 2021 Direct Testimony and Cross Examination on behalf of Cenovus Energy, Inc. before the Canada Energy Regulator (“CER”) in Docket for S.C. 2019, c 28, s. 10 regarding the Application of Enbridge Inc. requesting approval of tolling structure involving contract tolls on its Mainline.
- May 28, 2021 Submitted Declaration on behalf of San Pablo Bay Pipeline Company before the California Public Utilities Commission in addressing the cost of service, cost of capital and achieved return supporting the applicant’s rate increase.
- Feb. 21-22, 2021 Direct Testimony and Cross Examination on behalf of Bandera Master Fund LP et al in the Court of Chancery of the State of Delaware Docket No. 2018-0372-JTL addressing issues related to issues of FERC ratemaking.
- Dec. 7, 2020 Submitted Evidence at the request of Cenovus Energy, Inc. before the Canada Energy Regulator (“CER”) in Docket for S.C. 2019, c 28, s. 10 regarding the Application of Enbridge Inc. requesting approval of tolling structure involving contract tolls on its Mainline. The Evidence recommended a methodology to employ to assess whether the tolls would be just and reasonable and consistent with the public interest.
- Nov. 10, 2020 Submitted Affidavit on behalf of SFPP, L.P. at the Federal Energy Regulatory Commission responding to issues rates by FERC Trial Staff and Complainants in Docket No. OR16-6-000 addressing issues related to adjustments to the calculation of the Return on Equity.
- Oct. 26, 2020 Oral Testimony on behalf of Colonial Pipeline Company in Docket No. OR18-7-002 addressing the proper methodology to employ in allocating cost between jurisdictional and non-jurisdictional services and issues related to depreciation.
- Oct. 19, 2020 Submitted Affidavit on behalf of SFPP, L.P. at the Federal Energy Regulatory Commission in Docket No. OR16-6-000 addressing issues related to adjustments to the calculation of the Return on Equity.
- Oct. 16, 2020 Submitted Rebuttal Expert Report on behalf of Bandera Master Fund LP et al in the Court of Chancery of the State of Delaware Docket No. 2018-0372-JTL addressing issues related to issues of FERC ratemaking.



- Sept. 11, 2020 Submitted Expert Report on behalf of Bandera Master Fund LP et al in the Court of Chancery of the State of Delaware Docket No. 2018-0372-JTL addressing issues related to issues of FERC ratemaking.
- Sept. 11, 2020 Submitted Affidavit on behalf of The Designated Carriers in Docket No. AD20-10-000 responding to issues raised by certain shipper comments regarding the appropriate factors to employ in calculating the Index the FERC applies to adjust oil pipeline rates.
- Aug. 17, 2020 Submitted Affidavit on behalf of The Designated Carriers in Docket No. AD20-10-000 regarding the appropriate factors to employ in calculating the Index the FERC applies to adjust oil pipeline rates.
- Aug. 13-14, 2020 Provided oral sur-rebuttal testimony and subject to cross examination on behalf of the Board of Supervisors of Loudon County in Docket No. PUR-2019-00218 addressing regulatory issues associated with setting tolls for the privately owned Dulles Greenway.
- Jul. 10, 2020 Submitted Direct Testimony on behalf of Williams MLP Operating LLC and Mockingbird Midstream Gas Services, LLC before the Railroad Commission of Texas in Docket No. GUD-10606 addressing regulatory economics issues associated with price discrimination.
- Jun. 26, 2020 Submitted Direct Testimony on behalf of the Board of Supervisors of Loudon County before the State Corporation Commission in Docket No. PUR-2019-00218 addressing regulatory issues associated with setting tolls for the privately owned Dulles Greenway.
- May 12-18, 2020 Oral testimony and cross examination on behalf of MPLX Ozark Pipe Line, LLC in Docket No. OR19-14-000 addressing issues related to product and destination markets and HHI calculations.
- Apr. 8, 2020 Filed Rebuttal Testimony on behalf of MPLX Ozark Pipe Line, LLC in Docket No. OR19-14-000 addressing issues related to product and destination markets and HHI calculations.

- Feb. 20, 2020 Filed Cross-Answering Testimony on behalf of Colonial Pipeline Company in Docket No. OR18-7-002 addressing the proper methodology to employ in allocating cost between jurisdictional and non-jurisdictional services and the economic life to use in depreciation calculations.
- Nov. 20, 2019 Filed Answering Testimony on behalf of Colonial Pipeline Company in Docket No. OR18-7-002 addressing the proper methodology to employ in allocating cost between jurisdictional and non-jurisdictional services.
- Sep 13, 2019 Filed Supplemental Direct Testimony on behalf of MPLX Ozark Pipe Line, LLC addressing issues related to product and destination markets and HHI calculations in Docket No. OR19-14-000.
- Aug. 13, 2019 Filed an affidavit on behalf of Buckeye Pipeline Company, L.P. regarding the calculation of a substantial change in economic circumstances under the Energy Policy Act of 1992, in Docket No. OR19-26-000.
- Jul. 5, 2019 Filed an affidavit on behalf of Buckeye Pipeline Company, L.P. regarding the justness and reasonableness of rates it charges to transport jet fuel to the New York City Airports, in Docket No. OR19-26-000.
- Jun. 26, 2019 Filed an affidavit on behalf of the Association of Oil Pipe Lines discussing issues related to the calculation of the cost of capital in Docket No. PL19-4-000.
- Jun. 19, 2019 Filed an affidavit on behalf of SFPP, L.P. discussing methodology employed to calculate cost of capital used in SFPP's Page 700 in Docket No. IS19-508-000.
- Mar. 27, 2019 Filed an affidavit on behalf of MPLX Ozark Pipe Line, LLC addressing issues related to product and destination markets and HHI calculations in Docket No. OR19-14-000.
- Mar. 20-21, 2019 Oral testimony and cross examination on behalf of White Cliffs Pipeline. LLC at the Federal Energy Regulatory Commission in Docket No. OR18-9-000 addressing issues related to market power.
- Jan. 22, 2019 Filed Rebuttal testimony on behalf of White Cliffs Pipeline. LLC at the Federal Energy Regulatory Commission in Docket No. OR18-9-000 addressing issues related to market power.

- Dec. 21, 2018 Filed Direct testimony on behalf of MPLX Ozark Pipe Line, LLC addressing issues related to product and destination markets and HHI calculations in Docket No. OR19-14-000.
- Sept. 10, 2018 Filed an affidavit on behalf of SFPP, L.P. addressing issues related to rates deemed just and reasonable by the Energy Policy Act of 1992 in Docket No. OR11-13-000 *et al.*
- Aug. 7, 2018 Filed affidavit on behalf of SFPP, L.P. in support of motion to reopen the record with regard to issues related to the impact of the Commission's Policy Statement on Income Tax Allowance in Docket No. IS08-390-000 *et al.*
- Jul. 30, 2018 Filed Supplemental Direct Testimony on behalf of White Cliffs Pipeline, L.L.C. containing a market power analysis in support of White Cliffs' application for authorization to charge market-based rates in Docket No. OR18-9-000
- Jul. 11, 2018 Filed affidavit on behalf of SFPP, L.P. explaining the basis for eliminating ADIT for a MLP that is not entitled to a tax allowance in Docket Nos. IS08-390-000 *et al.*
- Jun. 14, 2018 Filed Prepared Supplement Direct Testimony on behalf of West Texas LPG Pipeline Limited Partnership ("WTXP") addressing issues related to market power analyses in support of WTXP's application for authorization to charge market-based rates in Docket No. OR17-19-000.
- May 2, 2018 Filed Prepared Supplemental Direct Testimony on behalf of Wood River Pipe Lines LLC that contains a market power analyses in support of Wood River's application for authorization to charge market-based rates in Docket No. OR17-11-000.
- Apr. 9, 2018 Filed affidavit in support of the answer of Buckeye Pipeline Company, L.P. to the protest of various shippers to the tariff filing on Buckeye's Eastern Products System in Docket No. IS18-229-000.
- Apr. 9, 2018 Filed affidavit in support of the answer of Buckeye Pipeline Company, L.P. to the protest of various shippers to the tariff filing on Buckeye's Midwest Products System in Docket No. IS18-230-000.





- Mar. 22, 2018      Filed affidavit in support of the answer of White Cliffs Pipeline, L.L.C. to Protest of the Liquids Shippers Group to application of White Cliffs Pipeline, LLC's request for market-based ratemaking authority.
  
- Dec. 22, 2017      Filed affidavit in support of the request for rehearing of Plains Marketing, L.P. discussing pricing dynamics in the crude petroleum market.
  
- Dec. 21, 2017      Prepared Direct Testimony on behalf of White Cliffs Pipeline, L.L.C. in support of application for Market-Based Ratemaking Authority at the Federal Energy Regulatory Commission in Docket No. OR18-8-000.
  
- Nov. 7, 2017      Cross Examination on behalf of Laurel Pipe Line Company, L.P. at the Pennsylvania Public Utilities Commission in Docket No. A-2016-2575829 supporting Laurel's request to make operational changes to its pipeline service.
  
- Nov. 1, 2017      Filed Supplemental Rejoinder testimony on behalf of Laurel Pipe Line Company, L.P. at the Pennsylvania Public Utilities Commission in Docket No. A-2016-2575829 supporting Laurel's request to make operational changes to its pipeline service.
  
- Oct. 6, 2017      Filed Rejoinder testimony on behalf of Laurel Pipe Line Company, L.P. at the Pennsylvania Public Utilities Commission in Docket No. A-2016-2575829 supporting Laurel's request to make operational changes to its pipeline service.
  
- Aug. 31, 2017      Filed Rebuttal testimony on behalf of Laurel Pipe Line Company, L.P. at the Pennsylvania Public Utilities Commission in Docket No. A-2016-2575829 supporting Laurel's request to make operational changes to its pipeline service.
  
- Aug. 28, 2017      Filed Rebuttal Expert Witness Statement in Suburban Heating Oil Partners, LLC v. Buckeye Terminals LLC before the American Arbitration Association Case No. 01-16-0003-4900 involving the calculation of damages for alleged breach of contract.
  
- Aug. 7, 2017      Filed affidavit on behalf of Wood River Pipe Line, LLC responding to Protest of the application for Market-Based Ratemaking Authority at the Federal Energy Regulatory Commission in Docket No. OR17-11-000.
  
- Jul. 20, 2017      Cross Examination in Suburban Heating Oil Partners, LLC v. Buckeye Terminals LLC before the American Arbitration

- Association Case No. 01-16-0003-4900 involving the calculation of damages for alleged breach of contract.
- Jun. 26, 2017      Filed Rebuttal Expert Witness Statement in Suburban Heating Oil Partners, LLC v. Buckeye Terminals LLC before the American Arbitration Association Case No. 01-16-0003-4900 involving the calculation of damages for alleged breach of contract.
- Jun. 19, 2017      Filed Expert Witness Statement in Suburban Heating Oil Partners, LLC v. Buckeye Terminals LLC before the American Arbitration Association Case No. 01-16-0003-4900 involving the calculation of damages for alleged breach of contract.
- May 5, 2017        Filed Direct testimony on behalf of Wood River Pipe Line, LLC in support of application for Market-Based Ratemaking Authority at the Federal Energy Regulatory Commission in Docket No. OR17-11-000.
- Mar. 8, 2017        Oral testimony and cross examination of Crimson Pipeline, L.P. at the California Public Utilities Commission in Docket No. A.16-03-009 addressing issues related to cost of capital, risk and the use of the cost-of-service methodology in assessing whether rates are just and reasonable.
- Feb. 7, 2017        Filed Direct testimony on behalf of Laurel Pipe Line Company, L.P. at the Pennsylvania Public Utilities Commission in Docket No. A-2016-2575829 supporting Laurel's request to make operational changes to its pipeline service.
- Feb. 3, 2017        Filed 2<sup>nd</sup> Supplemental Rebuttal Testimony on behalf of West Texas LPG Pipeline Limited Partnership at the Railroad Commission of Texas in GUD No. 10455 regarding the calculation of cost-based rates in the presence of competition.
- Feb. 2, 2017        Oral testimony and cross examination in on behalf of SFPP, L.P. at the Federal Energy Regulatory Commission in Docket No. OR16-6-000 addressing issues related to cost of capital, risk, and billing determinants used to set cost-based rates for SFPP.
- Jan. 16, 2017        Filed Rebuttal Testimony on behalf of Crimson Pipeline, L.P. at the California Public Utilities Commission in Docket No. A.16-03-009 addressing issues related to cost of capital, risk and the use of the cost-of-service methodology in assessing whether rates are just and reasonable.

- Oct. 28, 2016      Filed Prepared Answering Testimony in response to Commission Trial Staff on behalf of SFPP, L.P. at the Federal Energy Regulatory Commission in Docket No. OR16-6-000 addressing issues related to the cost of capital.
- Oct. 21, 2016      Filed Supplemental Rebuttal Testimony on behalf of West Texas LPG Pipeline Limited Partnership at the Railroad Commission of Texas in GUD No. 10455 regarding the calculation of cost-based rates in the presence of competition.
- Oct. 18, 2016      Filed Prepared Answering Testimony in response to Commission Trial Staff on behalf of SFPP, L.P. at the Federal Energy Regulatory Commission in Docket No. OR16-6-000 addressing issues related to test period volumes and market evaluation.
- Sep. 19, 2016      Filed Affidavit on behalf of Enterprise TE Products Pipeline Company, LLC in Docket No. OR16-23-000, addressing issues related to cost-of-service and cost-allocation.
- Sep. 16, 2016      Filed Rebuttal Testimony on behalf of West Texas LPG Pipeline Limited Partnership at the Railroad Commission of Texas in GUD No. 10455 regarding economic theory underpinning the analysis of market rates.
- Aug. 17, 2016      Filed Direct Testimony on behalf of Crimson Pipeline, L.P. at the California Public Utilities Commission in Docket No. A.16-03-009 addressing issues related to cost of capital, risk and the use of the cost-of-service methodology in assessing whether rates are just and reasonable.
- Aug. 12, 2016      Filed Answering Testimony on behalf of SFPP, L.P. at the Federal Energy Regulatory Commission in Docket No. OR16-6-000 addressing issues related to cost of capital, risk, and billing determinants used to set cost-based rates for SFPP.
- Aug. 1, 2016      Filed Direct Testimony in support of the application for market-based ratemaking authority of Buckeye Linden Pipe Line Company LLC.
- Jul. 25, 2016      Provided Verified Statement on behalf of Crimson Pipeline, L.P. at the California public Utilities Commission in Docket No. A.16-03-009 addressing issues raised by shippers in response to request for emergency rate relief



- Jun. 15, 2016      Provided Verified Statement on behalf of Crimson Pipeline, L.P. at the California public Utilities Commission in Docket No. A.16-03-009 regarding the need for emergency rate relief.
  
- Mar. 11, 2016      Provided Testimony on behalf of Crimson Pipeline, L.P. at the California Public Utilities Commission in Docket No. A.16-03-009 regarding achieved return and cost of capital
  
- Oct. 8, 2015        Presented Oral Testimony on behalf of Buckeye Pipe Line Company, L.P. at FERC in Docket No. OR14-4-000 responding to testimony regarding the competitive status of certain markets served by the carrier
  
- Jul. 1, 2015        Provided Testimony on behalf of Newfield Production Company at the 269<sup>th</sup> District Court in Case No. 201534624 regarding FERC process and principles related to committed rates
  
- Jun. 26, 2015      Filed Prepared Answering Testimony on behalf of Buckeye Pipe Line Company, L.P. at FERC in Docket No. OR14-4-000 responding to testimony regarding the competitive status of certain markets served by the carrier
  
- May 15, 2015      Filed Prepared Rebuttal Testimony on behalf of Zydeco Pipeline Company LLC at FERC in Docket No. IS14-607-000 *et al* responding to overhead cost allocation, rate design and cost of capital related issues
  
- Mar. 24-27, 2015   Presented Oral Testimony at FERC on behalf of Buckeye Pipe Line Company, L.P. in Docket No. OR12-28-001 regarding economic principles of cost allocation and evaluation of allocation methodology
  
- Jan. 20, 2015      Filed Prepared Answering Testimony at FERC on behalf of Buckeye Pipe Line Company, L.P. in Docket Nos. OR14-4-000 *et al*. regarding analyses underlying a market power determination
  
- Dec. 19, 2014      Filed Prepared Answering Testimony Responding to Commission Trial Staff at FERC on behalf of Buckeye Pipe Line Company, L.P. in Docket No. OR12-28-001 regarding economic principles of cost allocation and evaluation of allocation methodology
  
- Dec. 15, 2014      Filed Direct Testimony at FERC on behalf of Zydeco Pipeline Company LLC in Docket No. IS14-607-000 *et al* discussing regarding cost allocation and cost of capital issues
  
- Oct. 7, 2014        Filed Prepared Answering Testimony on behalf of Buckeye Pipe Line Company, L.P. at FERC in Docket No. OR12-28-001

regarding economic principles of cost allocation and evaluation of allocation methodology

- Aug. 7, 2014      Filed Rebuttal Written Evidence at the Canadian National Energy Board on behalf of Shell Trading Canada on matters regarding apportionment methodologies in Hearing Order RHW-001-2013
- Jul. 27, 2014      Filed Affidavit on behalf of SFPP, L.P. in Docket No. OR14-35 regarding the efficiency of the FERC's indexing methodology
- Jun. 4, 2014      Filed Direct Testimony at FERC on behalf of Shell Pipeline Company, L.P. in Docket No. IS14-104-000 *et al.* discussing regarding cost allocation and cost of capital issues
- Apr. 25, 2014      Filed Direct Written Evidence at the Canadian National Energy Board on behalf of Shell Trading Canada on matters regarding apportionment methodologies in Hearing Order RHW-001-2013
- Nov. 12-14, 2013      Presented oral testimony, cross examination before the Virginia State Corporation Commission regarding cost-of-service and rate design issues for a private toll road in PUE-2013-00011
- Nov. 4, 2013      Filed Affidavit at FERC on behalf of Buckeye Pipeline Company, L.P. in Docket No. OR14-4 in support of its motion to dismiss
- Oct. 15, 2013      Filed Rebuttal testimony at the Virginia State Corporation Commission regarding cost-of-service regulation and ratemaking issues in Case No. PUE-2013-00011
- Sept. 23, 2013      Filed prepared testimony at the Regulatory Commission of Alaska on behalf of BP Pipelines (Alaska) Inc. calculating a cost-based rate and providing theoretical support in Docket No. TL143-311
- Apr. 30, 2013      Submitted Joint Expert Report to the Virginia State Corporation Commission regarding cost-of-service regulation and ratemaking issues in Case No. PUE-2013-00011
- Apr. 29, 2013      Presented oral testimony and cross examination at the California Public Utilities Commission on behalf of SFPP, L.P. discussing theoretical principles of cost allocation with regard to Application No. 09-05-014
- Dec. 12, 2012      Filed Rebuttal Testimony at FERC on behalf of Enterprise TE Products Pipeline Company LLC in Docket No. IS12-203-000 on matters relating to rate design and cost-of-capital

- Nov. 5, 2012 Filed Direct Testimony at the California Public Utilities Commission on behalf of SFPP, L.P. discussing theoretical principles of cost allocation with regard to Application No. 09-05-014
- Oct. 10, 2012 Filed Verified Statement at FERC on behalf of Buckeye Pipeline Company, L.P. in Docket No. OR12-28-000 regarding the justness and reasonableness of the pipeline's rates
- Jul. 18, 2012 Filed Affidavit at FERC on behalf of Association of Oil Pipe Lines in Docket No. OR12-4-000 on issues related to assessing competition in the context of applications for market-based ratemaking authority
- Jul. 16, 2012 Filed Reply Verified Statement at FERC on behalf of Buckeye Pipeline Company, L.P. in Docket No. IS12-185-000
- Jul. 9, 2012 Filed Prepared Direct Testimony at FERC on behalf of Enterprise TE Products Pipeline Company LLC in Docket No. IS12-203-000 on matters relating to rate design and cost-of-capital
- May 15, 2012 Filed Verified Statement at FERC on behalf of Buckeye Pipeline Company, L.P. in Docket No. IS12-185-000 addressing issues related to ratemaking in the context of the company's ratemaking program
- Apr. 18-20, 2012 Presented oral testimony and responded to questions of Commissioners at the Public Service Commission of the State of Wyoming on behalf of Belle Fourche Pipeline Company in Docket no. 50000-61-PR-11 on issues related to cost-of-service and cost-of-capital
- Feb. 1, 2012 Filed Supplement Direct Testimony at the Public Service Commission of the State of Wyoming on behalf of Belle Fourche Pipeline Company in Docket No. 50000-61-PR-11 on issues related to cost-of-service and cost of capital
- Jan. 10-11, 2012 Presented Oral Testimony and cross examination at the FERC on behalf of Enbridge Pipelines (Southern Lights) LLC in Docket Nos. IS10-399-000 *et al.* on issues related to cost-of-service and rate design
- Jan. 9, 2012 Filed Supplemental Direct Testimony at FERC on behalf of SFPP, L.P. in Docket No. IS11-444-001 revising calculations to accord with Commission's new cost-of service ruling





- Jan. 6, 2012 Filed Rebuttal Testimony before the State Corporation Commission of the State of Kansas on behalf of Mid-America Pipeline Company, LLC in Docket No. 12-MDAP-068-RTS on issues related to cost-of-service and rate design
- Dec. 13, 2011 Filed Direct Testimony at FERC on behalf of SFPP, L.P. in Docket No. IS11-444-001 regarding the proposed indexation of pipeline rates and the economic principles of the Commission's indexing methodology
- Nov. 1, 2011 Filled Rebuttal Testimony at the Federal Regulatory Commission on behalf of Enbridge Pipelines (Southern Lights) LLC in Docket Nos. IS10-399-000 *et al.* on issues related to cost-of-service and rate design
- Oct. 25, 2011 Filed Affidavit on behalf of Mid-America Pipeline Company, LLC before the State Corporation Commission of the State of Kansas in Docket No. 12-MDAP-068-RTS in support of a Motion to Compel
- Oct. 14, 2011 Filed Direct Testimony before the Public Service Commission of the State of Wyoming on behalf of Belle Fourche Pipeline Company in Docket No. 50000-61-PR-11 on issues related to cost-of-service and cost-of-capital
- Aug. 19, 2011 Filed Direct Testimony before the State Corporation Commission of the State of Kansas on behalf of Mid-America Pipeline Company, LLC in Docket No. 12-MDAP-068-RTS on issues related to cost-of-service and rate design
- Jun. 7, 2011 Filed Direct Testimony at FERC on behalf of Enbridge Pipelines (Southern Lights) LLC in Docket Nos. IS10-399-000, *et al.* on issues related to cost-of-service and rate design
- Jul. 2, 2010 Presented oral cross examination of behalf of SFPP, L.P. addressing issues associated with cost allocation and volume projections in Docket No. IS09-437
- May 14, 2010 Filed Rebuttal Testimony on behalf of SFPP, L.P. addressing issues associated with cost allocation, and volume projections in Docket No. IS09-437
- May 10-11, 2010 Presented oral cross examination behalf of San Pablo Bay Pipeline Company, LLC at the California Public Utility Commission supporting its Application for market based rates in Docket No. A.08-09-024

- Apr. 15, 2010 Filed Direct Testimony on behalf of Kuparuk Transportation Company on cost of service issues before the Regulatory Commission of Alaska
- Feb. 23-24, 2010 Presented oral Testimony on behalf of SFPP, L.P. at the California Public Utilities Commission addressing issues associated with competition, sound regulatory policy, and macro-economic conditions in Docket No. 09-05-014
- Feb. 8, 2010 Filed Rebuttal Testimony on behalf of San Pablo Bay Pipeline Company LLC in Docket No. A-08-09-024 addressing issues related to competitive analysis of its markets
- Jan. 25, 2009 Filed Rebuttal Testimony on behalf of SFPP, L.P. at the California Public Utilities Commission addressing issues associated with competition, sound regulatory policy and macro-economic conditions in Docket No. A. 09-05-014
- Dec. 29, 2009 Filed Verified Statement on behalf of San Pablo Bay Pipeline, LLC supporting Motion to Compel in Docket No. A 08-09-024
- Dec. 11, 2009 Filed Direct Testimony on behalf of SFPP, L.P. addressing issues associated with cost-allocation, and volume projections in Docket No. IS09-437
- Sept. 21, 2009 Filed Affidavit supporting SFPP, L.P.'s Petition for Rehearing in Docket No. IS09-437
- Jun. 26, 2009 Presented Oral Sur-rebuttal testimony on behalf of SFPP, L.P. addressing issues associated with volume projections and economic conditions
- Jun. 18-19, 2009 Presented Oral Testimony on behalf of SFPP, L.P. at FERC in Docket No. IS08-390-002 addressing issues discussed in prepared Direct and Rebuttal Testimony
- Mar. 27, 2009 Filed Rebuttal Testimony at FERC discussing cost-allocation, depreciation, and the economic conditions associated with demand for refined petroleum products in SFPP's destination market
- Jan. 13, 2009 Filed Sworn Declaration on behalf of San Pablo Bay Pipeline, LLC supporting its Response to Tesoro's Motion for Summary Adjudication in Docket No. A.08-09-024



- Dec. 2-4, 2008      Presented Oral Testimony on behalf of SFPP, L.P. at FERC addressing theoretical issues related to allocation of cost and the economic life of the pipeline
- Oct. 16, 2008      Filed Direct Testimony at FERC on behalf of SFPP, L.P. in Docket No. IS08-390-002 discussing theoretical principles of cost allocation
- Sept. 30, 2008      Filed Direct Testimony on behalf of San Pablo Bay Pipeline Company LLC at the California Public Utilities Commission in Docket No. A.08-09-024 supporting its market based rates and examining the competition in origin and destination markets using conventional measures of market concentration and competition
- Sept. 9, 2008      Filed Answering Testimony at FERC on behalf of SFPP, L.P. in Docket No. OR03-5-000, discussing theoretical issues associated with cost-allocation and the economic life of the pipeline
- Jul. 6, 2007      Filed Affidavit at FERC in support of a motion for rehearing of Frontier Pipeline Company in Docket No. OR01-2-000 and OR01-4-000 discussing calculation of refunds owed by Frontier.

### **Rate Regulation Issues**

- Led the project team in developing data and preparing cost-of-service calculation in cost-based rate cases. Assisted multiple witnesses in drafting testimony regarding FERC requirements for cost-based ratemaking.
- Prepared cost-of-service filings, consistent with FERC regulations in 18 CFR § 346.2 on behalf of numerous oil pipelines.
- Assisted counsel in preparing cross examination regarding cost-based ratemaking and regulatory theory.
- Assisted multiple witnesses in drafting testimony presenting Stand-Alone Cost theory to the FERC.

### **Contract and Investor Disputes**

- Provided expert testimony on behalf of an investor class before the Court of Chancery of the State of Delaware that was favorably cited by the Court in finding liability and damages to the investor class in excess of \$800 million.
- Developed complex economic models to demonstrate that a lease between a joint venture operator and an affiliate had been conducted at arms-length and did not represent self-dealing, resulting in a favorable settlement for the client.

- Led a multi-witness project team opposing a claim of damages in a liquids terminal dispute, resulting in a finding of no damages for the client.

#### **Antitrust Matters**

- Prepared a whitepaper for the Federal Trade Commission analyzing the competitive impact of a pipeline acquisition in the Eastern Pennsylvania area.
- Developed a computer-based model to analyze the competitive impact of an oil pipeline acquisition in the mid-continent region. Prepared a detailed whitepaper explaining the theory behind the analysis and the results of the analysis. Met with FTC Staff to discuss the results of the analysis.
- Analyzed the competitive impact of a refinery acquisition in the northeastern United States. Constructed a computer-based simulation based on publicly available data and an analysis of how the acquisition would impact the market. Prepared multiple whitepapers reporting results of the analysis. Met with FTC Staff to discuss the results of the analysis.

#### **Market-Based Rate Filings**

- Assisted in the preparation of an application for market-based ratemaking authority and associated exhibits consistent with 18 CFR § 348 on behalf of Sunoco Pipeline, LP's market-based rate filing.
- Assisted in the preparation of expert testimony and exhibits filed in Shell Pipe Line Company LP in market-power case.
- Participated in the development of applications for market-based ratemaking authority on behalf of Chase Pipeline Company, Inc. West Shore Pipeline Company, Inc, and Marathon-Ashland Pipe Line LLC.

#### **Acquisition Due Diligence**

- Participated in a project team analyzing the regulatory risk that a private equity fund faced if it acquired a controlling interest in liquids.
- Participated in a project team analyzing the regulatory risk that a pipeline company considering a conversion in ownership structure from a corporation to a master limited partnership could face if its rates were contested by its shippers.

#### **Involvement in Prior Regulatory Matters**

##### **FERC Matters**

OR03-5-001

Complaint against the rates of SFPP's North Line and



**Oregon Line**

IS05-216-000	Protest against the rates of Mid-America Pipeline
IS05-82-000, IS06-01-000	Protest and Complaint against TAPS CARRIERS rates
OR05-7-000	Sunoco Logistics Partners, L.C. Market Based Rate filing
OR96-2-000	Protest and complaint against SFPP's Sepulveda pipeline system
OR05-1-000	Petition for Declaratory Order Filed by Enbridge's Spearhead pipeline
OR01-2-000	Calculating reparations owed by Frontier to Big West and Chevron
OR02-10-000	Shell Pipe Line Company, LP application for market-based ratemaking authority
IS02-384-000	Protest and Complaint against Platte Pipe Line Company and Express Pipeline Company, LLC
OR96-2-000	Complaint against SFPP's rates
OR01-06-000	Application of West Shore Pipe Line Company for market-based ratemaking authority
OR01-03-000, OR01-05-000	Complaint against the rates of Anschutz Ranch East Pipeline Inc.
OR01-02-000, OR01-04-000	Complaint against the rates of Frontier Pipeline Company
OR01-1-000	Application of Chase Transportation Company for market-based ratemaking authority
OR00-1-000	Application of Marathon-Ashland Pipe Line, LLC for market-based ratemaking authority

**State Matters**

PUR-2019-00218	Application of Toll Road Investors Partnership II, L.P. for
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Authorization for an Increase in the Maximum Level of  
Tolls at the Commonwealth of Virginia State Corporation  
Commission

P-03-4 Protest and complaint at the Regulatory Commission of  
Alaska against the rates of the TAPS Carriers

TO-01147 Protest against Olympic Pipe Line Company, Inc's rate  
increase at the Washington Utilities and  
Telecommunications Commission

P97-4 and P97-7 Protest and complaint at the Regulatory Commission of  
Alaska against the rates of the TAPS Carriers

TX 1999-00532 Challenge to Arizona tax court's determination that SFPP's  
property should be valued at other than original cost

#### **Other Entities**

Docket No. 42084 Analyzing the return of Valero's ammonia pipeline

Civ No. 96-Z-2451 Challenge to the rates charged by a CO<sub>2</sub> Pipeline in Federal  
District Court

Case No. 70 198 Challenge to a pro-rationing policy of Amoco Oil Company  
00294-99 filed before the American Arbitration Association

#### **Publications and Presentations**

"Allocating Pipeline Capacity and Priority Service" Presented at the 2018 Annual  
Business Conference of the Association of Oil Pipe Lines

"State Regulation" Presented at the 2019 and 2018 Annual Business Conference of  
the Association of Oil Pipe Lines

"Market-Based Rates" Presented at the 2017, 2016, 2015, 2014, 2013, and 2012  
Annual Business Conference of the Association of Oil Pipe Lines



“Allocating Pipeline Capacity: Navigating Shipper Issues in Priority Service and Proration Policies” Presented at the 2018 Annual Business Conference of the Association of Oil Pipelines

“Introduction to FERC Ratemaking” Presented at the 2022-2011 Annual Business Conference of the Association of Oil Pipe Lines

“Cost of Service Concepts” Presented at the 2022, 2021, 2019 2016, 2015 Annual Business Conference of the Association of Oil Pipe Lines

“Pipeline Update” Presented at the November 2014 Mexican Energy Infrastructure Symposium

Webb, M.J and Williams, J.C “Price Regulation Allowing NGL Pipelines to Adjust to Current Conditions” Natural Gas & Electricity (August 2013) 17-22

Presentation at EUCI regarding all aspects of ratemaking for the liquid pipeline industry, December 2012

“Regulatory Basics for Oil Pipelines” Presented at the 2015, 2013, 2012, 2011, 2010, and 2009 Annual Business Conference of the Association of Oil Pipe Lines

“Ratemaking: Beyond the Basics” Presented at the 2011, 2010, 2009, and 2008 Annual Business Conference of the Association of Oil Pipe Lines

“New Developments in Pipeline Expansions: Executing the Deal” Presented at the 2011 Annual Business Conference of the Association of Oil Pipe Lines

“FERC 101” Presented at the 2008 and 2007 Annual Business Conference of the Association of Oil Pipe Lines

The Political Economy of the Israel Palestine Conflict: An Evolutionary Game Theory Approach: Doctoral Dissertation

Rowley, C.K and M. J. Webb “Israel and Palestine: the slow road to peace or the fast track to mutual annihilation” Public Choice (July 2007) 132: 7-26

“The Antitrust Review of Oil Pipe Line Mergers at the FTC” Presented that the 2007 Annual Business Conference of the Association of Oil Pipe Lines

“Surviving a Rate Case” Presented at the 2006 Annual Business Conference of the Association of Oil Pipe Lines

### **Previous Relevant Employment**

*Association of Oil  
Pipe Lines  
(1997-1998)*

*Intern*

Prepared statistical analysis of pipe line failures from publicly available sources. Assisted Executive Director in employing economic theory to address industry concerns.



## **Education**

*George Mason  
University*

PhD, Economics  
MA, Economics

*American University*

BA (*Magna Cum Laude*) International Relations, Economics

**San Pablo Bay Pipeline Company**  
**2023 COS Rate Filing**  
**Exhibits to MJW Declaration**

**Index of Exhibits and Schedules**

**Exhibit MJW-1** Curriculum Vitae of Dr. Michael J Webb

**Exhibit MJW-2** Achieved Return

**Exhibit MJW-3** Cost of Service and Cost-Based Rates

<u>Exhibit MJW-3 Schedules and Workpapers</u>			<u>Tab</u>
Proposed Rates	Proposed Rates per Route	Proposed Rates	
FAC Rate Design	Fully Allocated Costs Rate Design	FAC	
Statement A	Total Cost of Service	A	
Statement B	Operating Expenses	B	
Statement C	Overall Return on Rate Base	C	
Statement E	Rate Base	E1	
Statement F1	AFUDC	F1	
Statement F2	Amortization of AFUDC	F2	
Statement G	Operating Revenues	G	
WorkPaper 1	Total Company Input Data	WP1	
WorkPaper 2	Carrier Property and Depreciation Expenses	WP2	
WorkPaper 3	Volumes and Revenues for 2022	WP3	
WorkPaper 4	Volumes and Revenues for the Base and Test Period	WP4	
WorkPaper 5	Rate of Return on Equity for the Base and Test Period	WP5	

Exhibit MJW-2

San Pablo Bay Pipeline Company

2023 COS Rate Filing

Achieved Return for the Test Period

Achieved Return  
Page 1 of 1

Line No.	Description	Source	[a] <u>Effective Rates</u>	[b] <u>10% Increased Rates</u>	[c] <u>Cost-Based Rates</u>
<u>Pipeline Transportation Rates</u>					
1	Route 1 Deliveries from SPB - 20" to Shell and Valero Refineries	Proposed Rates, Route 1	\$1,771	\$1,948	\$2,421
2	Route 2 Deliveries from Station 36 to San Joaquin Refinery	Proposed Rates, Route 2	\$0,378	\$0,414	\$0,414
3	Route 3 Deliveries from Vine Hill to Shell and Valero Refineries	Proposed Rates, Route 3	\$0,250	\$0,250	\$0,250
<u>Pipeline Deliveries in Bbls</u>					
4	Route 1 Deliveries from SPB - 20" to Shell and Valero Refineries	WorkPaper 4, Lines (1 to 3), Column [f]	24,232,756	24,232,756	24,232,756
5	Route 2 Deliveries from Station 36 to San Joaquin Refinery	WorkPaper 4, Line 4, Column [f]	3,624,854	3,624,854	3,624,854
6	Route 3 Deliveries from Vine Hill to Shell and Valero Refineries	WorkPaper 4, Line 5, Column [f]	-	-	-
<u>Pipeline Transportation Revenues</u>					
7	Route 1 Deliveries from SPB - 20" to Shell and Valero Refineries	Lines (1 * 4)	\$42,916,212	\$47,205,410	\$58,667,503
8	Route 2 Deliveries from Station 36 to San Joaquin Refinery	Lines (2 * 5)	\$1,370,195	\$1,500,690	\$1,500,690
9	Route 3 Deliveries from Vine Hill to Shell and Valero Refineries	Lines (3 * 6)	\$0	\$0	\$0
8	Pipeline Transportation Revenues Total	Sum Lns (7 to 9)	\$44,286,406	\$48,706,099	\$60,168,193
9	Allowance Oil Revenues	WorkPaper 4, Line 9, Column [i]	\$2,818,806	\$2,818,806	\$2,818,806
10	Other Revenues	WorkPaper 4, Lines (7 + 8), Column [i]	\$195,599	\$195,599	\$195,599
11	Total Revenues	Sum Lns (8 to 10)	\$47,300,812	\$51,720,504	\$63,182,598
12	Operating Expenses Excluding Depreciation	Statement A, Line 2	\$43,664,722	\$43,664,722	\$43,664,722
13	Depreciation Expense	Statement A, Line 3	\$7,113,324	\$7,113,324	\$7,113,324
14	Amortization of AFUDC	Statement A, Line 4	\$286,242	\$286,242	\$286,242
15	Total Expenses	Sum Lns (12 to 14)	\$51,064,287	\$51,064,287	\$51,064,287
16	Operating Income	Lines (11 - 15)	(\$3,763,476)	\$656,217	\$12,118,311
17	Average Original Cost Rate Base	Statement C, Line 1	\$103,177,455	\$103,177,455	\$103,177,455
18	<b>Achieved Overall Return on Rate Base</b>	Lines (16 / 17)	<b>-3.65%</b>	<b>0.64%</b>	<b>11.75%</b>
19	Weighted Cost of Debt	Statement C, Line 9	3.52%	3.52%	3.52%
20	Weighted Rate of Return on Equity	Lines (18 - 19)	-7.17%	-2.88%	8.23%
21	Equity Ratio	WorkPaper 1, Line 20	60.00%	60.00%	60.00%
22	<b>Achieved Rate of Return on Equity</b>	Lines (20 / 21)	<b>-11.95%</b>	<b>-4.81%</b>	<b>13.71%</b>



Route	Line	Receipt Location	Delivery Location	Cal P.U.C. No. 2.14.0 Effective Pipeline Rates in \$/Bbl	[a]	[b]	[c]	[d]
<b>1</b>	<b>Deliveries from SPB - 20" to Shell and Valero Refineries</b>			<b>\$1.771</b>		<b>\$1.948</b>	<b>\$2.421</b>	<b>36.7%</b>
	1	Coalinga Gathering	Shell Refinery	\$1.771		\$1.948	\$2.421	10.0%
	2	Coalinga Station	Shell Refinery	\$1.771		\$1.948	\$2.421	10.0%
	3	Station 36	Shell Refinery	\$1.771		\$1.948	\$2.421	10.0%
	4	Kern River	Shell Refinery	\$1.771		\$1.948	\$2.421	10.0%
	5	Poso Creek	Shell Refinery	\$1.771		\$1.948	\$2.421	10.0%
	6	Bakersfield Tank Farm	Shell Refinery	\$1.771		\$1.948	\$2.421	10.0%
	7	Macpherson	Shell Refinery	\$1.771		\$1.948	\$2.421	10.0%
	8	Kern Front	Shell Refinery	\$1.771		\$1.948	\$2.421	10.0%
	9	North Shafter	Shell Refinery	\$1.771		\$1.948	\$2.421	10.0%
	10	Station 31	Shell Refinery	\$1.771		\$1.948	\$2.421	10.0%
	11	Fairfield	Shell Refinery	\$1.771		\$1.948	\$2.421	10.0%
	12	Kernridge Station	Shell Refinery	\$1.771		\$1.948	\$2.421	10.0%
	13	Coalinga Gathering	Valero Refinery	\$1.771		\$1.948	\$2.421	10.0%
	14	Coalinga Station	Valero Refinery	\$1.771		\$1.948	\$2.421	10.0%
	15	Station 36	Valero Refinery	\$1.771		\$1.948	\$2.421	10.0%
	16	Kern River	Valero Refinery	\$1.771		\$1.948	\$2.421	10.0%
	17	Poso Creek	Valero Refinery	\$1.771		\$1.948	\$2.421	10.0%
	18	Bakersfield Tank Farm	Valero Refinery	\$1.771		\$1.948	\$2.421	10.0%
	19	Macpherson	Valero Refinery	\$1.771		\$1.948	\$2.421	10.0%
	20	Kern Front	Valero Refinery	\$1.771		\$1.948	\$2.421	10.0%
	21	North Shafter	Valero Refinery	\$1.771		\$1.948	\$2.421	10.0%
	22	Station 31	Valero Refinery	\$1.771		\$1.948	\$2.421	10.0%
	23	Fairfield	Valero Refinery	\$1.771		\$1.948	\$2.421	10.0%
	24	Kernridge Station	Valero Refinery	\$1.771		\$1.948	\$2.421	10.0%
<b>2</b>	<b>Deliveries from Station 36 to San Joaquin Refinery</b>			<b>\$0.378</b>		<b>\$0.414</b>	<b>\$0.414</b>	<b>9.5%</b>
	25	Station 36	San Joaquin Refinery	\$0.378		\$0.414	\$0.414	9.5%
<b>3</b>	<b>Deliveries from Vine Hill to Shell and Valero Refineries</b>			<b>\$0.250</b>		<b>\$0.250</b>	<b>\$0.250</b>	<b>0.0%</b>
	26	Vine Hill Station	Shell Refinery	\$0.250		\$0.250	\$0.250	0.00%
	27	Vine Hill Station	Valero Refinery	\$0.250		\$0.250	\$0.250	0.00%

Line	Source				Test Period				
1	Total Cost of Service	Statement A, Line 5				\$60,175,630			
2	Non-Distance Related Costs (\$)	Statement B, Line 21				\$9,268,640			
3	Distance Related Costs	Lines (1 - 2)				\$50,906,990			
4	Deliveries in Bbls	WorkPaper 4, Line 6, Column [c]				27,857,610			
5	Non-Distance Related Costs \$/Bbl	Lines (2 / 4)				\$0.3327			
6	Deliveries in Bbl-Miles	WorkPaper 4, Line 6, Column [d]				6,144,989,863			
7	Distance Related Costs \$/Bbl-Mile	Lines (3 / 6)				\$0.0083			
<b>Route</b>									
8	Deliveries from SPB - 20" to Shell and Valero Refineries	Deliveries in Bbls	Deliveries in Bbl-Miles	FAC per Route	FAC per Bbl	Effective Rates per Bbl	Pipeline Revenues @ Effective Rates	Cost-Based Rate Change in \$/Bbl	Cost-Based Rate Change in %
9	Deliveries from Station 36 to San Joaquin Refinery	[a]	[b]	[c]	[d]	[e]	[f]	[g]	[h]
10	Deliveries from Vine Hill to Shell and Valero Refineries	24,232,756	6,109,212,555	\$58,673,197	\$2,421	\$1.771	\$42,916,212	\$0.650	36.7%
11	Total	3,624,854	35,777,308	\$1,502,433	\$0.414	\$0.378	\$1,370,195	\$0.036	9.5%
		0	0	\$0	\$0.000	\$0.250	\$0		
		27,857,610	6,144,989,863	\$60,175,630			\$44,286,406		

- [a] From WorkPaper 4, Column [f]  
[b] From WorkPaper 4, Column [g]  
[c] Line 5 \* Column [b] + Line7 \* Column [c]  
[d] Columns [c] / [a]  
[e] From WorkPaper 4, Col. [a]  
[f] Columns ([a] \* [e])  
[g] Columns ([d] - [e])  
[h] Columns ([g] / [e])

**Exhibit MJW-3**  
**San Pablo Bay Pipeline Company**  
**2023 COS Rate Filing**  
**Total Cost of Service**

**Statement A**  
**Page 1 of 1**

Line	Description	Source	Base Period	Test Period
1	Overall Return on Rate Base	Statement C, Line 7	\$11,590,479	\$12,125,748
2	Operating Expenses Excluding Depreciation	Statement B, Lines (20 - 13)	\$32,065,900	\$43,664,722
3	Depreciation Expense	Statement B, Line 13	\$6,892,983	\$7,113,324
4	Amortization of AFUDC	Statement F2, Lines (4 + 10)	\$274,609	\$286,242
5	Total Cost of Service before Non-Transportation Revenue Credit	Sum Lines 1 through 4	\$50,823,971	\$63,190,035
6	Allowance Oil Revenue Credit	WorkPaper 1, - Ln 42	(\$4,385,761)	(\$2,818,806)
7	Other Revenue Credit	WorkPaper 1, - Lines (43 + 44)	(\$224,365)	(\$195,599)
8	Total Non-Transportation Revenue Credit	Lines (6 + 7)	(\$4,610,126)	(\$3,014,405)
9	Total Cost of Service After Non-Transportation Revenue Credit	Lines (5 + 8)	\$46,213,845	\$60,175,630
10	Transportation Revenues	WorkPaper 1, Line 41	\$44,639,803	\$44,286,406
11	Revenue Excess (Deficiency)	Lines (10 - 9)	(\$1,574,042)	(\$15,889,224)
12	Revenue Excess (Deficiency) in Percent		-3.5%	-35.9%



Line No.	Description	2022 Actual	Normalizing Adjustments Adjustment 1 Adjustment 2	Base Period
		1/ 2/ 3/ 4/		
	OPERATIONS AND MAINTENANCE			
1	300 Salaries and Wages	\$4,898,828	\$0	\$4,898,828
2	310 Materials and Supplies	\$263,087	\$0	\$263,087
3	320 Outside Services	\$4,785,260	\$0	\$4,785,260
4	330 Operating Fuel and Power	\$10,996,703	(\$2,003,599)	\$7,154,455
5	340 Oil Losses and Shortages	\$1,179,512	\$0	\$1,179,512
6	350 Rentals	\$274,019	\$0	\$274,019
7	390 Other Expenses	\$450,164	\$0	\$450,164
8	Total Operations Expense	\$22,847,573	(\$2,003,599)	\$19,005,325
	GENERAL			
9	500 Salaries and Wages	\$3,060,800	\$0	\$3,060,800
10	510 Materials and Supplies	\$150,149	\$0	\$150,149
11	520 Outside Services	\$3,340,463	\$0	\$3,340,463
12	530 Rentals	\$90,708	\$0	\$90,708
13	540 Depreciation and Amortization	\$6,892,983	\$0	\$6,892,983
14	550 Employee Benefits	\$1,022,071	\$0	\$1,022,071
15	560 Insurance	\$2,657,598	\$0	\$2,657,598
16	570 Casualty and Other Losses	\$0	\$0	\$0
17	580 Pipeline Taxes	\$2,160,354	\$0	\$2,160,354
18	590 Other Expenses	\$578,431	\$0	\$578,431
19	Total General Expense	\$19,953,558	\$0	\$19,953,558
20	Total Operating Expenses	\$42,801,131	(\$2,003,599)	\$38,958,883
21	Non-Distance Operating Expenses	\$8,242,623	\$0	\$8,242,623

- 1/ FERC 300 to 590 from WP1, Lines 22 to 38,  
FERC 540 from WP1, Line 9  
2/ To remove Fuel and Power costs associated with KLM  
tariff volumes moved on SPB  
3/ To remove Fuel and Power costs associated with Plains  
tariff volumes moved on SPB  
4/ Sum items 1/ to 3/

Line No.	Description	Test Period Adjustments												Test Period
		Adjustment 1 5/	Adjustment 2 6/	Adjustment 3 7/	Adjustment 4 8/	Adjustment 5 9/	Adjustment 6 10/	Adjustment 7 11/	Adjustment 8 12/	Adjustment 9 13/	Adjustment 10 14/	Adjustment 11 15/	Adjustment 12 16/	17/
1	OPERATIONS AND MAINTENANCE	\$599,286	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,498,114
2	300 Salaries and Wages	\$0	(\$31,480)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	310 Materials and Supplies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$231,607
4	320 Outside Services	\$0	\$0	\$3,583,346	\$5,510,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,878,606
5	330 Operating Fuel and Power	\$0	\$0	\$0	\$0	\$0	\$1,794,491	\$0	\$0	\$0	\$0	\$0	\$0	\$8,948,946
6	340 Oil Losses and Shortages	\$0	\$0	\$0	\$0	\$0	\$0	(\$929,512)	\$0	\$0	\$0	\$0	\$0	\$250,000
7	350 Rentals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$101,513	\$0	\$0	\$0	\$0	\$375,532
8	390 Other Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$70,975)	\$379,188
8	Total Operations Expense	\$599,286	(\$31,480)	\$3,583,346	\$5,510,000	\$0	\$1,794,491	(\$929,512)	\$101,513	\$0	\$0	\$0	(\$70,975)	\$29,561,993
9	GENERAL	\$22,337	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,083,137
10	500 Salaries and Wages	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$180,547
11	510 Materials and Supplies	\$0	\$30,399	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,015,314
12	520 Outside Services	\$0	\$0	(\$75,149)	\$0	\$750,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,490
13	530 Rentals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$77,219)	\$0	\$0	\$0	\$0	\$0
14	540 Depreciation and Amortization	\$286,627	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$220,340	\$0	\$0	\$0	\$7,113,324
15	550 Employee Benefits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,308,698
16	560 Insurance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$37,812)	\$0	\$0	\$2,619,786
17	570 Casualty and Other Losses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
18	580 Pipeline Taxes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$53,949	\$0	\$2,214,303
19	590 Other Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$89,023	\$667,454
19	Total General Expense	\$308,964	\$30,399	(\$75,149)	\$0	\$750,000	\$0	\$0	(\$77,219)	\$220,340	(\$37,812)	\$53,949	\$89,023	\$21,216,053
20	Total Operating Expenses	\$908,249	(\$1,081)	\$3,508,197	\$5,510,000	\$750,000	\$1,794,491	(\$929,512)	\$24,294	\$220,340	(\$37,812)	\$53,949	\$18,047	\$50,778,046
21	Non-Distance Operating Expenses	\$308,964	\$30,399	(\$75,149)	\$0	\$750,000	\$0	\$0	(\$77,219)	\$0	\$0	\$0	\$89,023	\$9,268,640

- 5/ To reflect changes in employee-related costs  
6/ To reflect decreases in field office-related supplies  
7/ To reflect increased integrity testing and maintenance work  
8/ To reflect changes in SPB's accounting practices  
9/ To account for audit/tax, rate filing, and litigation costs  
10/ To reflect increases in power costs due to increases in natural gas prices  
11/ To account for non-recurring losses  
12/ To reflect changes in right-of-way costs  
13/ To reflect depreciation changes and \$6.5M in property additions  
14/ To reflect decreases in insurance costs  
15/ To reflect increases in pipeline taxes  
16/ To reflect slightly higher travel cost/offset by lower accounting system costs  
18/ Sum items 4/ to 16/

**Exhibit MJW-3****San Pablo Bay Pipeline Company****2023 COS Rate Filing****Overall Return on Rate Base****Statement C****Page 1 of 1**

Line	Description	Source	Base Period	Test Period
1	Average Original Cost Rate Base	Statement E, Line 9	\$106,999,014	\$103,177,455
2	Equity Ratio	WorkPaper 1, Line 20	60.00%	60.00%
3	Debt Ratio	1.0 - Line 2	40.00%	40.00%
4	Rate of Return on Equity	WorkPaper 1, Line 22	13.72%	13.72%
5	Cost of Debt	WorkPaper 1, Line 21	6.50%	8.80%
6	Weighted Cost of Capital	Lines ((2 * 4) + (3 * 5))	10.83%	11.75%
7	Overall Return on Rate Base	Lines (6 * 1)	\$11,590,479	\$12,125,748
8	Weighted Rate of Return on Equity	Lines (2 * 4)	8.23%	8.23%
9	Weighted Cost of Debt	Lines (3 * 5)	2.60%	3.52%
10	Return on Equity	Lines (1 * 8)	\$8,808,505	\$8,493,902
11	Interest Expense	Lines (1 * 9)	\$2,781,974	\$3,631,846

Exhibit MJW-3

San Pablo Bay Pipeline Company  
2023 COS Rate Filing  
Rate Base

Statement E  
Page 1 of 3

Line	Description	Source	2004	2005	2006	2007	2008	2009	2010
<u>Total Carrier Property in Service</u>									
1	Carrier Property in Service	WorkPaper 1, Line 8		\$188,720,293	\$192,611,521	\$193,721,316	\$197,044,598	\$203,395,777	\$202,200,304
2	Accumulated AFUDC	Statement F2, Lns (2 + 8)		\$144,641	\$410,240	\$484,156	\$922,645	\$2,196,380	\$2,196,380
3	Total Carrier Property in Service	Lines (1 + 2)		\$188,864,935	\$193,021,761	\$194,205,472	\$197,967,342	\$205,592,156	\$204,396,684
<u>Total Accumulated Depreciation</u>									
4	Accumulated Depreciation of Carrier Property	WorkPaper 1, Line 12		\$73,169,431	\$78,242,303	\$83,379,206	\$88,427,650	\$92,902,271	\$97,736,001
5	Accumulated Amortization of AFUDC	Statement F2, Lns (5 + 11)		\$1,933	\$9,343	\$21,279	\$40,067	\$81,769	\$140,536
6	Total Accumulated Depreciation	Lines (4 + 5)		\$73,171,364	\$78,251,646	\$83,400,486	\$88,467,717	\$92,984,041	\$97,876,537
7	Net Carrier Property In Service	Lines (3 - 6)		\$115,693,570	\$114,770,115	\$110,804,986	\$109,499,626	\$112,608,116	\$106,520,147
8	Working Capital	WorkPaper 1, Ln. 19		\$86,000	\$86,000	\$86,000	\$86,000	\$86,000	\$86,000
9	Original Cost Rate Base	Lines (7 + 8)		\$115,779,570	\$114,856,115	\$110,890,986	\$109,585,626	\$112,694,116	\$106,606,147
10	Average Original Cost Rate Base	Average Line 9			\$115,317,843	\$112,873,551	\$110,238,306	\$111,139,871	\$109,650,131

**Exhibit MJW-3**

**San Pablo Bay Pipeline Company  
2023 COS Rate Filing  
Rate Base**

Line	Description	Source	2011	2012	2013	2014	2015	2016	2017
<b>Total Carrier Property in Service</b>									
1	Carrier Property in Service	WorkPaper 1, Line 8	\$202,815,149	\$211,445,011	\$212,783,355	\$218,340,417	\$223,897,071	\$230,356,973	\$226,483,115
2	Accumulated AFUDC	Statement F2, Lns (2 + 8)	\$2,480,676	\$3,718,603	\$4,299,500	\$5,301,214	\$6,374,762	\$7,574,905	\$7,615,223
3	Total Carrier Property in Service	Lines (1 + 2)	\$205,295,824	\$215,163,613	\$217,082,855	\$223,641,631	\$230,271,834	\$237,931,878	\$234,098,338
<b>Total Accumulated Depreciation</b>									
4	Accumulated Depreciation of Carrier Property	WorkPaper 1, Line 12	\$103,080,453	\$108,523,331	\$113,944,437	\$119,683,835	\$125,575,033	\$131,628,650	\$137,714,495
5	Accumulated Amortization of AFUDC	Statement F2, Lns (5 + 11)	\$203,050	\$285,842	\$392,934	\$521,171	\$677,216	\$863,703	\$1,066,695
6	Total Accumulated Depreciation	Lines (4 + 5)	\$103,283,502	\$108,809,173	\$114,337,371	\$120,205,006	\$126,252,249	\$132,492,353	\$138,781,191
7	Net Carrier Property In Service	Lines (3 - 6)	\$102,012,322	\$106,354,441	\$102,745,484	\$103,436,625	\$104,019,585	\$105,439,525	\$95,317,147
8	Working Capital	WorkPaper 1, Ln. 19	\$86,000	\$83,807	\$83,807	\$83,807	\$83,807	\$83,807	\$83,807
9	Original Cost Rate Base	Lines (7 + 8)	\$102,098,322	\$106,438,248	\$102,829,291	\$103,520,432	\$104,103,392	\$105,523,332	\$95,400,954
10	Average Original Cost Rate Base	Average Line 9	\$104,352,235	\$104,268,285	\$104,633,769	\$103,174,862	\$103,811,912	\$104,813,362	\$100,462,143

**Exhibit MJW-3**  
**San Pablo Bay Pipeline Company**  
**2023 COS Rate Filing**  
**Rate Base**

**Statement E**  
**Page 3 of 3**

Line	Description	Source	2018	2019	2020	2021	Base Period	Test Period
<u>Total Carrier Property in Service</u>								
1	Carrier Property in Service	WorkPaper 1, Line 8	\$249,836,803	\$252,814,750	\$255,892,425	\$259,124,662	\$265,579,900	\$265,579,900
2	Accumulated AFUDC	Statement F2, Lns (2 + 8)	\$9,327,290	\$9,541,231	\$9,886,572	\$10,141,705	\$10,610,505	\$10,610,505
3	Total Carrier Property in Service	Lines (1 + 2)	\$259,164,093	\$262,355,980	\$265,778,996	\$269,266,367	\$276,190,404	\$276,190,404
<u>Total Accumulated Depreciation</u>								
4	Accumulated Depreciation of Carrier Property	WorkPaper 1, Line 12	\$144,051,555	\$150,724,711	\$157,476,090	\$160,314,412	\$167,207,395	\$174,320,719
5	Accumulated Amortization of AFUDC	Statement F2, Lns (5 + 11)	\$1,292,780	\$1,544,293	\$1,803,772	\$1,914,971	\$2,189,579	\$2,475,821
6	Total Accumulated Depreciation	Lines (4 + 5)	\$145,344,335	\$152,269,004	\$159,279,862	\$162,229,382	\$169,396,974	\$176,796,540
7	Net Carrier Property In Service	Lines (3 - 6)	\$113,819,757	\$110,086,977	\$106,499,135	\$107,036,984	\$106,793,430	\$99,393,865
8	Working Capital	WorkPaper 1, Ln. 19	\$83,807	\$83,807	\$83,807	\$83,807	\$83,807	\$83,807
9	Original Cost Rate Base	Lines (7 + 8)	\$113,903,564	\$110,170,784	\$106,582,942	\$107,120,791	\$106,877,237	\$99,477,672
10	Average Original Cost Rate Base	Average Line 9	\$104,652,259	\$112,037,174	\$108,376,863	\$106,851,867	\$106,999,014	\$103,177,455



## Exhibit MJW-3

San Pablo Bay Pipeline Company  
2023 COS Rate Filing  
AFUDCStatement F1  
Page 1 of 3

Line Description	Source	2004	2005	2006	2007	2008	2009	2010
1 Equity Ratio	WorkPaper 1, Line 20		60.00%	60.00%	60.00%	60.00%	60.00%	60.00%
2 Debt Ratio	1.0 - Line 1		40.00%	40.00%	40.00%	40.00%	40.00%	40.00%
3 Rate of Return on Equity	WorkPaper 1, Line 22		12.79%	12.48%	12.27%	15.23%	12.68%	10.71%
4 Cost of Debt	WorkPaper 1, Line 21		6.60%	6.60%	6.60%	6.60%	6.50%	6.50%
5 Depreciable Property in Service Additions	WorkPaper 1, Lines (5 - 1)		\$3,142,716	\$3,891,228	\$1,143,294	\$3,245,685	\$7,972,617	\$0
6 CWIP Additions	WorkPaper 1, Line 15		\$3,516,972	\$2,517,261	\$7,440,231	\$3,190,738	\$2,849,491	\$3,447,023
7 CWIP Balance	WorkPaper 1, Line 18	\$2,496,086	\$2,870,342	\$1,496,375	\$7,793,312	\$7,738,365	\$2,615,239	\$6,062,262
8 Average CWIP Balance	Average Line 7		\$2,683,214	\$2,183,358	\$4,644,844	\$7,765,838	\$5,176,802	\$4,338,750
9 CWIP In Service Ratio	Lines (5 / (6 + Prior 7))		52.26%	72.23%	12.79%	29.55%	75.30%	0.00%
10 Equity AFUDC BOY	Prior Line 13		\$0	\$98,291	\$76,115	\$372,728	\$802,532	\$320,674
11 Equity AFUDC Additions	Lines ((8 * 1 + Prior 13) * 2)		\$205,910	\$175,757	\$351,293	\$766,409	\$495,723	\$313,152
12 Equity AFUDC Transfers to Rate Base	Lines (9 * (10 + 11))		\$107,618	\$197,933	\$54,680	\$336,604	\$977,582	\$0
13 Equity AFUDC EOY	Lines (10 + 11 - 12)		\$98,291	\$76,115	\$372,728	\$802,532	\$320,674	\$633,826
14 Debt AFUDC BOY	Prior Line 17		\$0	\$33,814	\$26,021	\$131,126	\$242,913	\$97,146
15 Debt AFUDC Additions	Lines ((8 * 2 + Prior 17) * 4)		\$70,837	\$59,872	\$124,341	\$213,672	\$150,386	\$119,122
16 Debt AFUDC Transfers to Rate Base	Lines (9 * (14 + 15))		\$37,023	\$67,666	\$19,236	\$101,885	\$296,153	\$0
17 Debt AFUDC EOY	Lines (14 + 15 - 16)		\$33,814	\$26,021	\$131,126	\$242,913	\$97,146	\$216,268



Line Description	Source	2011	2012	2013	2014	2015	2016	2017
1 Equity Ratio	WorkPaper 1, Line 20	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%
2 Debt Ratio	1.0 - Line 1	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%
3 Rate of Return on Equity	WorkPaper 1, Line 22	11.94%	11.75%	14.29%	12.05%	11.45%	14.65%	13.23%
4 Cost of Debt	WorkPaper 1, Line 21	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%
5 Depreciable Property in Service Additions	WorkPaper 1, Lines (5 - 1)	\$1,887,079	\$8,706,849	\$2,218,970	\$5,512,011	\$5,553,935	\$6,474,563	\$631,802
6 CWIP Additions	WorkPaper 1, Line 15	\$5,169,660	\$7,532,848	(\$219,246)	\$6,881,603	\$3,151,931	\$2,485,248	\$12,892,926
7 CWIP Balance	WorkPaper 1, Line 18	\$9,344,842	\$8,170,841	\$5,732,626	\$7,102,218	\$4,700,215	\$710,899	\$12,972,023
8 Average CWIP Balance	Average Line 7	\$7,703,552	\$8,757,842	\$6,951,733	\$6,417,422	\$5,901,216	\$2,705,557	\$6,841,461
9 CWIP In Service Ratio	Lines (5 / (6 + Prior 7))	16.80%	51.59%	27.91%	43.70%	54.16%	90.11%	4.64%
10 Equity AFUDC BOY	Prior Line 13	\$633,826	\$1,049,567	\$866,762	\$1,143,953	\$982,831	\$687,905	\$101,568
11 Equity AFUDC Additions	Lines ((8 * 1 + Prior 13) * 2)	\$627,688	\$740,816	\$719,989	\$601,651	\$517,926	\$338,703	\$556,513
12 Equity AFUDC Transfers to Rate Base	Lines (9 * (10 + 11))	\$211,948	\$923,622	\$442,798	\$762,772	\$812,852	\$925,040	\$30,563
13 Equity AFUDC EOY	Lines (10 + 11 - 12)	\$1,049,567	\$866,762	\$1,143,953	\$982,831	\$687,905	\$101,568	\$627,518
14 Debt AFUDC BOY	Prior Line 17	\$216,268	\$358,270	\$294,956	\$356,774	\$307,876	\$220,623	\$30,206
15 Debt AFUDC Additions	Lines ((8 * 2 + Prior 17) * 4)	\$214,350	\$250,991	\$199,917	\$190,043	\$173,444	\$84,685	\$179,841
16 Debt AFUDC Transfers to Rate Base	Lines (9 * (14 + 15))	\$72,348	\$314,305	\$138,099	\$238,942	\$260,696	\$275,102	\$9,755
17 Debt AFUDC EOY	Lines (14 + 15 - 16)	\$358,270	\$294,956	\$356,774	\$307,876	\$220,623	\$30,206	\$200,292

## Exhibit MJW-3

San Pablo Bay Pipeline Company  
2023 COS Rate Filing  
AFUDCStatement F1  
Page 3 of 3

Line Description	Source	2018	2019	2020	2021	Base Period	Test Period
1 Equity Ratio	WorkPaper 1, Line 20	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%
2 Debt Ratio	1.0 - Line 1	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%
3 Rate of Return on Equity	WorkPaper 1, Line 22	16.25%	13.98%	14.59%	14.59%	13.72%	13.72%
4 Cost of Debt	WorkPaper 1, Line 21	6.50%	6.50%	6.50%	6.50%	6.50%	8.80%
5 Depreciable Property in Service Additions	WorkPaper 1, Lines (5 - 1)	\$23,353,688	\$2,303,590	\$2,491,642	\$3,232,237	\$6,455,238	\$0
6 CWIP Additions	WorkPaper 1, Line 15	\$13,128,639	\$2,990,632	\$1,392,318	\$5,753,125	\$5,753,589	\$0
7 CWIP Balance	WorkPaper 1, Line 18	\$2,746,974	\$2,834,016	\$1,148,660	\$3,669,548	\$2,967,899	\$2,967,899
8 Average CWIP Balance	Average Line 7	\$7,859,498	\$2,790,495	\$1,991,338	\$2,409,104	\$3,318,723	\$2,967,899
9 CWIP In Service Ratio	Lines (5 / (6 + Prior 7))	89.48%	40.15%	58.96%	46.83%	68.50%	0.00%
10 Equity AFUDC BOY	Prior Line 13	\$627,518	\$157,425	\$247,484	\$187,948	\$226,633	\$167,223
11 Equity AFUDC Additions	Lines ((8 * 1 + Prior 13) * 2)	\$868,273	\$256,075	\$210,425	\$238,309	\$304,303	\$267,271
12 Equity AFUDC Transfers to Rate Base	Lines (9 * (10 + 11))	\$1,338,365	\$166,016	\$269,961	\$199,624	\$363,713	\$0
13 Equity AFUDC EOY	Lines (10 + 11 - 12)	\$157,425	\$247,484	\$187,948	\$226,633	\$167,223	\$434,494
14 Debt AFUDC BOY	Prior Line 17	\$200,292	\$43,957	\$71,442	\$52,480	\$63,019	\$48,315
15 Debt AFUDC Additions	Lines ((8 * 2 + Prior 17) * 4)	\$217,366	\$75,410	\$56,419	\$66,048	\$90,383	\$108,722
16 Debt AFUDC Transfers to Rate Base	Lines (9 * (14 + 15))	\$373,701	\$47,924	\$75,380	\$55,509	\$105,087	\$0
17 Debt AFUDC EOY	Lines (14 + 15 - 16)	\$43,957	\$71,442	\$52,480	\$63,019	\$48,315	\$157,037

Exhibit MJW-3  
San Pablo Bay Pipeline Company  
2023 COS Rate Filing  
Amortization of AFUDC

Statement F2  
Page 1 of 3

Line Description	Source	2004	2005	2006	2007	2008	2009	2010
1 Equity AFUDC Transfers to Rate Base	Statement F1, Line 12		\$107,618	\$197,933	\$54,680	\$336,604	\$977,582	\$0
2 Accumulated Equity AFUDC	Cumulative Line 1		\$107,618	\$305,551	\$360,231	\$696,836	\$1,674,417	\$1,674,417
3 Depreciation Rates	WorkPaper 1, Line 14		2.67%	2.67%	2.67%	2.67%	2.67%	2.68%
4 Amortization of Equity AFUDC	Lines ((Prior 2 + 1/2.0) * 3)		\$1,438	\$5,517	\$8,886	\$14,117	\$31,704	\$44,801
5 Accumulated Amortization of Equity AFUDC	Cumulative Line 4		\$1,438	\$6,955	\$15,841	\$29,958	\$61,662	\$106,464
6 Net Equity AFUDC	Line (2 - 5)		\$106,180	\$298,596	\$344,390	\$666,877	\$1,612,755	\$1,567,953
7 Debt AFUDC Transfers to Rate Base	Statement F1, Line 16		\$37,023	\$67,666	\$19,236	\$101,885	\$296,153	\$0
8 Accumulated Debt AFUDC	Cumulative Line 7		\$37,023	\$104,688	\$123,925	\$225,809	\$521,963	\$521,963
9 Depreciation Rates	WorkPaper 1, Line 14		2.67%	2.67%	2.67%	2.67%	2.67%	2.68%
10 Amortization of Debt AFUDC	Lines ((Prior 8 + 7/2.0) * 9)		\$495	\$1,892	\$3,051	\$4,671	\$9,998	\$13,966
11 Accumulated Amortization of Debt AFUDC	Cumulative Line 10		\$495	\$2,387	\$5,438	\$10,109	\$20,107	\$34,073
12 Net Debt AFUDC	Line (8 - 11)		\$36,528	\$102,301	\$118,487	\$215,701	\$501,856	\$487,890

**Exhibit MJW-3**  
**San Pablo Bay Pipeline Company**  
**2023 COS Rate Filing**  
**Amortization of AFUDC**

**Statement F2**  
**Page 2 of 3**

Line	Description	Source	2011	2012	2013	2014	2015	2016	2017
1	Equity AFUDC Transfers to Rate Base	Statement F1, Line 12	\$211,948	\$923,622	\$442,798	\$762,772	\$812,852	\$925,040	\$30,563
2	Accumulated Equity AFUDC	Cumulative Line 1	\$1,886,365	\$2,809,986	\$3,252,785	\$4,015,557	\$4,828,409	\$5,753,449	\$5,784,013
3	Depreciation Rates	WorkPaper 1, Line 14	2.67%	2.67%	2.67%	2.67%	2.67%	2.67%	2.67%
4	Amortization of Equity AFUDC	Lines ((Prior 2 + 1/2.0) * 3)	\$47,593	\$62,720	\$80,976	\$97,083	\$118,196	\$141,465	\$154,180
5	Accumulated Amortization of Equity AFUDC	Cumulative Line 4	\$154,057	\$216,777	\$297,754	\$394,837	\$513,033	\$654,498	\$808,678
6	Net Equity AFUDC	Line (2 - 5)	\$1,732,308	\$2,593,209	\$2,955,031	\$3,620,720	\$4,315,376	\$5,098,952	\$4,975,335
7	Debt AFUDC Transfers to Rate Base	Statement F1, Line 16	\$72,348	\$314,305	\$138,099	\$238,942	\$260,696	\$275,102	\$9,755
8	Accumulated Debt AFUDC	Cumulative Line 7	\$594,311	\$908,616	\$1,046,715	\$1,285,657	\$1,546,353	\$1,821,456	\$1,831,211
9	Depreciation Rates	WorkPaper 1, Line 14	2.67%	2.67%	2.67%	2.67%	2.67%	2.67%	2.67%
10	Amortization of Debt AFUDC	Lines ((Prior 8 + 7/2.0) * 9)	\$14,920	\$20,072	\$26,116	\$31,153	\$37,849	\$45,023	\$48,812
11	Accumulated Amortization of Debt AFUDC	Cumulative Line 10	\$48,993	\$69,064	\$95,181	\$126,334	\$164,183	\$209,206	\$258,018
12	Net Debt AFUDC	Line (8 - 11)	\$545,318	\$839,552	\$951,535	\$1,159,323	\$1,382,170	\$1,612,250	\$1,573,193

Line Description	Source	2018	2019	2020	2021	Base Period	Test Period
1 Equity AFUDC Transfers to Rate Base	Statement F1, Line 12	\$1,338,365	\$166,016	\$269,961	\$199,624	\$363,713	\$0
2 Accumulated Equity AFUDC	Cumulative Line 1	\$7,122,378	\$7,288,394	\$7,558,355	\$7,757,979	\$8,121,692	\$8,121,692
3 Depreciation Rates	WorkPaper 1, Line 14	2.67%	2.67%	2.67%	1.11%	2.65%	2.70%
4 Amortization of Equity AFUDC	Lines ((Prior 2 + 1/2.0) * 3)	\$172,226	\$192,092	\$198,294	\$85,038	\$210,132	\$219,100
5 Accumulated Amortization of Equity AFUDC	Cumulative Line 4	\$980,904	\$1,172,995	\$1,371,289	\$1,456,327	\$1,666,459	\$1,885,559
6 Net Equity AFUDC	Line (2 - 5)	\$6,141,474	\$6,115,399	\$6,187,065	\$6,301,652	\$6,455,233	\$6,236,132
7 Debt AFUDC Transfers to Rate Base	Statement F1, Line 16	\$373,701	\$47,924	\$75,380	\$55,509	\$105,087	\$0
8 Accumulated Debt AFUDC	Cumulative Line 7	\$2,204,912	\$2,252,837	\$2,328,217	\$2,383,726	\$2,488,813	\$2,488,813
9 Depreciation Rates	WorkPaper 1, Line 14	2.67%	2.67%	2.67%	1.11%	2.65%	2.70%
10 Amortization of Debt AFUDC	Lines ((Prior 8 + 7/2.0) * 9)	\$53,859	\$59,421	\$61,185	\$26,161	\$64,477	\$67,141
11 Accumulated Amortization of Debt AFUDC	Cumulative Line 10	\$311,877	\$371,297	\$432,482	\$458,643	\$523,120	\$590,262
12 Net Debt AFUDC	Line (8 - 11)	\$1,893,035	\$1,881,539	\$1,895,735	\$1,925,083	\$1,965,693	\$1,898,551

No.	Description	Source	Test Period
1	Revenues Under Proposed Rates	Proposed Rates, Col. [c] * FAC Rate Design Col. [a]	\$48,706,099
2	Revenues Under Presently Effective Rates	Proposed Rates, Col. [a] * FAC Rate Design Col. [a]	\$44,286,406
3	Revenues Under Maximum Ceiling Rates	Statement A, Line 9	\$46,213,845



**Exhibit MJW-3**

**San Pablo Bay Pipeline Company**

**2023 COS Rate Filing**

**Total Company Input Data**

**WorkPaper 1**

Line Description	Source	2004	2005	2006	2007	2008	2009	2010
<b>Carrier Property in Service ("CPIS")</b>								
1 Land Additions	Company Records		\$0	\$0	\$0	\$0	\$0	\$0
2 Land Retirements	Company Records		\$0	\$0	\$0	\$0	\$0	\$0
3 Land Adjustments and Transfers	Company Records		\$0	\$0	\$0	\$0	(\$1,585)	\$0
4 Land EOY	Sum Lns (1 to 3 + Prior 4) 1/	\$717,349	717,349	\$717,349	\$717,349	\$717,349	\$715,764	\$715,764
5 CPIS Additions	Company Records		\$3,142,716	\$3,891,228	\$1,143,294	\$3,245,685	\$7,972,617	\$0
6 CPIS Retirements	Company Records		\$0	\$0	\$0	(\$151,112)	(\$860,184)	(\$573,273)
7 CPIS Adjustments and Transfers	Company Records		\$0	\$0	(\$33,499)	\$228,809	(\$761,354)	(\$622,199)
8 CPIS EOY	Sum Lns (5 to 7 + Prior 8) 1/	\$185,577,577	188,720,293	\$192,611,521	\$193,721,316	\$197,044,698	\$203,395,777	\$202,200,304
9 Depreciation Expense	Company Records 2/		\$4,983,045	\$5,072,872	\$5,136,903	\$5,199,556	\$5,334,806	\$5,407,002
10 Depreciation Retirements	Company Records		\$0	\$0	\$0	(\$151,112)	(\$860,184)	(\$573,273)
11 Depreciation Adjustments and Transfers	Company Records		\$0	\$0	\$0	\$0	\$0	\$0
12 Accumulated Depreciation EOY	Sum Lns (9 to 11 + Prior 12) 1/	\$68,186,386	73,169,431	\$78,242,303	\$83,379,206	\$88,427,650	\$92,902,271	\$97,736,001
13 Depreciable Carrier Property in Service EOY	Lines (8 - 4)		\$188,002,945	\$191,894,172	\$193,003,967	\$196,327,349	\$202,680,013	\$201,484,541
14 Depreciation Rates	Lns (9 / Avg 13)	\$184,860,228	2.67%	2.67%	2.67%	2.67%	2.67%	2.68%
<b>Construction Work in Progress ("CWIP")</b>								
15 CWIP Additions	Company Records		\$3,516,972	\$2,517,261	\$7,440,231	\$3,190,738	\$2,849,491	\$3,447,023
16 CWIP Retirements	Company Records		(\$3,142,716)	(\$3,891,228)	(\$1,143,294)	(\$3,245,685)	(\$7,972,617)	\$0
17 CWIP Adjustments and Transfers	Company Records		\$0	\$0	\$0	\$0	\$0	\$0
18 CWIP EOY	Sum Lns (15 to 17 + Prior 18) 1/	\$2,496,086	\$2,870,342	\$1,496,375	\$7,793,312	\$7,738,365	\$2,615,239	\$6,062,262
19 Working Capital	Company Records		\$86,000	\$86,000	\$86,000	\$86,000	\$86,000	\$86,000
<b>Cost of Capital</b>								
20 Equity Ratio	CPUC Decision 20-11-026, Issued 11.23.20, Section 7.3		60.00%	60.00%	60.00%	60.00%	60.00%	60.00%
21 Cost of Debt	Company Records		6.60%	6.60%	6.60%	6.60%	6.50%	6.50%
22 Rate of Return on Equity	Proxy Group 3/		12.79%	12.48%	12.27%	15.23%	12.68%	10.71%

1/ 2004 and 2005 EOY Balances from Company Records

2/ Depreciation Expense for years 2017 forward from WorkPaper 2

3/ ROE for Base Period and Test Period from WorkPaper 5

Exhibit MJW-3

San Pablo Bay Pipeline Company  
2023 COS Rate Filing  
Total Company Input Data

WorkPaper 1

Line	Description	Source	2011	2012	2013	2014	2015	2016	2017
<b>Carrier Property in Service ("CPIS")</b>									
1	Land Additions	Company Records	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2	Land Retirements	Company Records	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	Land Adjustments and Transfers	Company Records	\$0	\$0	\$0	\$0	\$0	(\$1,087)	\$0
4	Land EOY	Sum Lns (1 to 3 + Prior 4) 1/	\$715,764	\$715,764	\$715,764	\$715,764	\$715,764	\$714,677	\$714,677
5	CPIS Additions	Company Records	\$1,887,079	\$8,706,849	\$2,218,970	\$5,512,011	\$5,553,935	\$6,474,563	\$631,802
6	CPIS Retirements	Company Records	(\$49,829)	(\$70,486)	(\$225,911)	\$0	\$0	\$0	\$0
7	CPIS Adjustments and Transfers	Company Records	(\$1,222,406)	(\$6,502)	(\$654,714)	\$45,051	\$2,720	(\$14,661)	(\$4,505,660)
8	CPIS EOY	Sum Lns (5 to 7 + Prior 8) 1/	\$202,815,149	\$211,445,011	\$212,783,355	\$218,340,417	\$223,897,071	\$230,356,973	\$226,483,115
9	Depreciation Expense	Company Records 2/	\$5,394,280	\$5,513,364	\$5,647,017	\$5,739,398	\$5,891,198	\$6,053,617	\$6,085,845
10	Depreciation Retirements	Company Records	(\$49,829)	(\$70,486)	(\$225,911)	\$0	\$0	\$0	\$0
11	Depreciation Adjustments and Transfers	Company Records	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12	Accumulated Depreciation EOY	Sum Lns (9 to 11 + Prior 12) 1/	\$103,080,453	\$108,523,331	\$113,944,437	\$119,683,835	\$125,575,033	\$131,628,650	\$137,714,495
13	Depreciable Carrier Property in Service EOY	Lines (8 - 4)	\$202,099,385	\$210,729,247	\$212,067,592	\$217,624,653	\$223,181,308	\$229,642,297	\$225,768,438
14	Depreciation Rates	Lns (9 / Avg 13)	2.67%	2.67%	2.67%	2.67%	2.67%	2.67%	2.67%
<b>Construction Work in Progress ("CWIP")</b>									
15	CWIP Additions	Company Records	\$5,169,660	\$7,532,848	(\$219,246)	\$6,881,603	\$3,151,931	\$2,485,248	\$12,892,926
16	CWIP Retirements	Company Records	(\$1,887,079)	(\$8,706,849)	(\$2,218,970)	(\$5,512,011)	(\$5,553,935)	(\$6,474,563)	(\$631,802)
17	CWIP Adjustments and Transfers	Company Records	\$0	\$0	\$0	\$0	\$0	\$0	\$0
18	CWIP EOY	Sum Lns (15 to 17 + Prior 18) 1/	\$9,344,842	\$8,170,841	\$5,732,626	\$7,102,218	\$4,700,215	\$710,899	\$12,972,023
19	Working Capital	Company Records	\$86,000	\$83,807	\$83,807	\$83,807	\$83,807	\$83,807	\$83,807
<b>Cost of Capital</b>									
20	Equity Ratio	CPUC Decision 20-11-026, Issued 11.23.20, Section 7.3	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%
21	Cost of Debt	Company Records	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%
22	Rate of Return on Equity	Proxy Group 3/	11.94%	11.75%	14.29%	12.05%	11.45%	14.65%	13.23%

1/ 2004 and 2005 EOY Balances from Company Records

2/ Depreciation Expense for years 2017 forward from WorkPaper 2

3/ ROE for Base Period and Test Period from WorkPaper 5

## WorkPaper 1

Line	Description	Source	2018	2019	2020	2021	Base Period	Test Period
Carrier Property in Service ("CPIS")								
1	Land Additions	Company Records	\$0	\$600,000	\$586,033	\$0	\$0	\$0
2	Land Retirements	Company Records	\$0	\$0	\$0	\$0	\$0	\$0
3	Land Adjustments and Transfers	Company Records	\$0	\$0	\$0	\$0	\$0	\$0
4	Land EOY	Sum Lns (1 to 3 + Prior 4) 1/	\$714,677	\$1,314,677	\$1,900,710	\$1,900,710	\$1,900,710	\$1,900,710
5	CPIS Additions	Company Records	\$23,353,688	\$2,903,590	\$3,077,675	\$3,232,237	\$6,455,238	\$0
6	CPIS Retirements	Company Records	\$0	\$0	\$0	\$0	\$0	\$0
7	CPIS Adjustments and Transfers	Company Records	\$0	\$74,358	\$0	\$0	\$0	\$0
8	CPIS EOY	Sum Lns (5 to 7 + Prior 8) 1/	\$249,836,803	\$252,814,750	\$255,892,425	\$259,124,662	\$265,579,900	\$265,579,900
9	Depreciation Expense	Company Records 2/	\$6,337,060	\$6,673,156	\$6,751,379	\$2,838,322	\$6,892,983	\$7,113,324
10	Depreciation Retirements	Company Records	\$0	\$0	\$0	\$0	\$0	\$0
11	Depreciation Adjustments and Transfers	Company Records	\$0	\$0	\$0	\$0	\$0	\$0
12	Accumulated Depreciation EOY	Sum Lns (9 to 11 + Prior 12) 1/	\$144,051,555	\$150,724,711	\$157,476,090	\$160,314,412	\$167,207,395	\$174,320,719
13	Depreciable Carrier Property in Service EOY	Lines (8 - 4)	\$249,122,126	\$251,500,073	\$253,991,715	\$257,223,952	\$263,679,190	\$263,679,190
14	Depreciation Rates	Lns (9 / Avg 13)	2.67%	2.67%	2.67%	1.11%	2.65%	2.70%
Construction Work in Progress ("CWIP")								
15	CWIP Additions	Company Records	\$13,128,639	\$2,990,632	\$1,392,318	\$5,753,125	\$5,753,589	\$0
16	CWIP Retirements	Company Records	(\$23,353,688)	(\$2,903,590)	(\$3,077,675)	(\$3,232,237)	(\$6,455,238)	\$0
17	CWIP Adjustments and Transfers	Company Records	\$0	\$0	\$0	\$0	\$0	\$0
18	CWIP EOY	Sum Lns (15 to 17 + Prior 18) 1/	\$2,746,974	\$2,834,016	\$1,148,660	\$3,669,548	\$2,967,899	\$2,967,899
19	Working Capital	Company Records	\$83,807	\$83,807	\$83,807	\$83,807	\$83,807	\$83,807
Cost of Capital								
20	Equity Ratio	CPUC Decision 20-11-026, Issued 11.23.20, Section 7.3	60.00%	60.00%	60.00%	60.00%	60.00%	60.00%
21	Cost of Debt	Company Records	6.50%	6.50%	6.50%	6.50%	6.50%	8.80%
22	Rate of Return on Equity	Proxy Group 3/	16.25%	13.98%	14.59%	14.59%	13.72%	13.72%
1/	2004 and 2005 EOY Balances from Company Records							
2/	Depreciation Expense for years 2017 forward from WorkPaper 2							
3/	ROE for Base Period and Test Period from WorkPaper 5							

**Exhibit MJW-3**  
**San Pablo Bay Pipeline Company**  
**2023 COS Rate Filing**  
**Total Company Input Data**

**WorkPaper 1**

Line	Description	Source	Base Period	Test Period
<b>Operating Expenses</b>				
<b>OPERATIONS AND MAINTENANCE</b>				
22	300 Salaries and Wages	Statement B, Line 1	\$4,898,828	\$5,498,114
23	310 Materials and Supplies	Statement B, Line 2	\$263,087	\$231,607
24	320 Outside Services	Statement B, Line 3	\$4,785,260	\$13,878,606
25	330 Operating Fuel and Power	Statement B, Line 4	\$10,996,703	\$8,948,946
26	340 Oil Losses and Shortages	Statement B, Line 5	\$1,179,512	\$250,000
27	350 Rentals	Statement B, Line 6	\$274,019	\$375,532
28	390 Other Expenses	Statement B, Line 7	\$450,164	\$379,188
29	Total Operations Expense	Sum Lns (22 to 28)	\$22,847,573	\$29,561,993
<b>GENERAL</b>				
30	500 Salaries and Wages	Statement B, Line 9	\$3,060,800	\$3,083,137
31	510 Materials and Supplies	Statement B, Line 10	\$150,149	\$180,547
32	520 Outside Services	Statement B, Line 11	\$3,340,463	\$4,015,314
33	530 Rentals	Statement B, Line 12	\$90,708	\$13,490
34	550 Employee Benefits	Statement B, Line 14	\$1,022,071	\$1,308,698
35	560 Insurance	Statement B, Line 15	\$2,657,598	\$2,619,786
36	570 Casualty and Other Losses	Statement B, Line 16	\$0	\$0
37	580 Pipeline Taxes	Statement B, Line 17	\$2,160,354	\$2,214,303
38	590 Other Expenses	Statement B, Line 18	\$578,431	\$667,454
39	Total General Expense	Sum Lns (30 to 38)	\$13,060,575	\$14,102,729
40	Total Operating Expenses Excluding Depreciation	Line (29 + 39)	\$35,908,148	\$43,664,722
<b>Revenues</b>				
41	210 Transportation Revenues	WorkPaper 4, Line 6	\$44,639,803	\$44,286,406
42	230 Allowance Oil Revenues	WorkPaper 4, Line 9	\$4,385,761	\$2,818,806
43	260 Other Revenues - Truck Rack	WorkPaper 4, Line 7	\$209,117	\$180,480
44	260 Other Revenues - CPUC Fees	WorkPaper 4, Line 8	\$15,249	\$15,119
<b>Volumes</b>				
45	Deliveries in Bbls	WorkPaper 4, Line 6	27,857,610	6,144,989,863



Carrier Property Account	Depreciation Rate	2016	2017	2018	2019	2020	2021	Base Period	Test Period
		Carrier Property in Service EOY 1/							
101 Land	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
102 Right of Way	2.81%	\$ 287,128	\$ 287,240	\$ 287,240	\$ 287,240	\$ 287,240	\$ 287,240	\$ 287,240	\$ 287,240
103 Line Pipe	3.12%	\$ 2,563,098	\$ 2,563,098	\$ 2,563,098	\$ 2,563,098	\$ 2,563,098	\$ 2,563,098	\$ 2,563,098	\$ 2,563,098
104 Line Pipe Fittings	3.14%	\$ 563,364	\$ 564,256	\$ 564,256	\$ 564,256	\$ 564,256	\$ 564,256	\$ 564,256	\$ 564,256
105 Pipeline Construction	2.84%	\$ 4,125,349	\$ 4,125,481	\$ 4,125,481	\$ 4,125,481	\$ 4,125,481	\$ 4,125,481	\$ 4,125,481	\$ 4,125,481
106 Buildings	2.77%	\$ 70,945	\$ 73,255	\$ 73,255	\$ 73,255	\$ 73,255	\$ 73,255	\$ 73,255	\$ 73,255
107 Boilers	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
108 Pumping Equipments	3.09%	\$ 1,039,541	\$ 1,069,510	\$ 1,069,510	\$ 1,069,510	\$ 1,069,510	\$ 1,069,510	\$ 1,069,510	\$ 1,069,510
109 Machine Tools and Machinery	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
110 Other Station Equipment	2.95%	\$ 778,331	\$ 797,521	\$ 797,521	\$ 797,521	\$ 797,521	\$ 797,521	\$ 797,521	\$ 797,521
111 Oil Tanks	2.59%	\$ 550,397	\$ 550,397	\$ 550,397	\$ 550,397	\$ 550,397	\$ 550,397	\$ 550,397	\$ 550,397
112 Delivery Facilities	3.43%	\$ 96,754	\$ 96,754	\$ 96,754	\$ 96,754	\$ 96,754	\$ 96,754	\$ 96,754	\$ 96,754
113 Communication Systems	3.86%	\$ 268,461	\$ 271,611	\$ 271,611	\$ 271,611	\$ 271,611	\$ 271,611	\$ 271,611	\$ 271,611
114 Office Furniture and Fixtures	5.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
115 Vehicles & Other Work Equipment	6.67%	\$ 4,155	\$ 4,155	\$ 4,155	\$ 4,155	\$ 4,155	\$ 4,155	\$ 4,155	\$ 4,155
116 Other Property	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GATHERING LINES Subtotal		\$ 10,347,522	\$ 10,403,277	\$ 10,403,277	\$ 10,403,277	\$ 10,403,277	\$ 10,403,277	\$ 10,403,277	\$ 10,403,277
<b>TRUNK LINES</b>									
151 Land	0.00%	\$ 714,677	\$ 714,677	\$ 714,677	\$ 1,314,677	\$ 1,900,710	\$ 1,900,710	\$ 1,900,710	\$ 1,900,710
152 Right of Way	1.97%	\$ 3,634,333	\$ 3,634,333	\$ 3,720,033	\$ 3,720,033	\$ 3,720,033	\$ 3,720,033	\$ 3,720,033	\$ 3,720,033
153 Line Pipe	3.00%	\$ 21,376,229	\$ 20,479,165	\$ 21,478,069	\$ 22,077,104	\$ 22,430,686	\$ 24,153,873	\$ 27,142,903	\$ 27,142,903
154 Line Pipe Fittings	2.65%	\$ 13,869,537	\$ 13,758,120	\$ 14,454,315	\$ 14,541,283	\$ 14,541,283	\$ 14,677,058	\$ 14,677,058	\$ 14,677,058
155 Pipeline Construction	2.58%	\$ 101,112,758	\$ 99,084,264	\$ 119,933,181	\$ 120,003,181	\$ 120,003,181	\$ 120,003,181	\$ 120,003,181	\$ 120,003,181
156 Buildings	2.53%	\$ 2,186,999	\$ 2,148,708	\$ 2,148,708	\$ 2,231,503	\$ 2,231,503	\$ 2,231,503	\$ 2,231,503	\$ 2,231,503
157 Boilers	3.00%	\$ 426,673	\$ 426,673	\$ 426,673	\$ 426,673	\$ 426,673	\$ 426,673	\$ 426,673	\$ 426,673
158 Pumping Equipments	2.70%	\$ 8,565,708	\$ 8,691,694	\$ 8,691,694	\$ 8,691,694	\$ 8,691,694	\$ 8,721,184	\$ 9,165,269	\$ 9,165,269
159 Machine Tools and Machinery	4.28%	\$ 113,339	\$ 113,339	\$ 113,339	\$ 113,339	\$ 113,339	\$ 113,339	\$ 113,339	\$ 113,339
160 Other Station Equipment	2.66%	\$ 40,294,844	\$ 39,014,535	\$ 39,448,377	\$ 40,366,734	\$ 40,672,227	\$ 40,859,221	\$ 40,910,596	\$ 40,910,596
161 Oil Tanks	2.67%	\$ 25,005,725	\$ 25,374,546	\$ 25,664,674	\$ 25,973,603	\$ 25,993,544	\$ 26,325,091	\$ 28,017,871	\$ 28,017,871
162 Delivery Facilities	2.58%	\$ 1,212,579	\$ 1,212,579	\$ 1,212,579	\$ 1,524,443	\$ 1,524,443	\$ 1,524,443	\$ 1,524,443	\$ 1,524,443
163 Communication Systems	3.74%	\$ 970,688	\$ 903,943	\$ 903,943	\$ 903,943	\$ 2,455,199	\$ 2,745,849	\$ 2,745,849	\$ 2,745,849
164 Office Furniture and Fixtures	5.00%	\$ 196,333	\$ 194,233	\$ 194,233	\$ 194,233	\$ 194,233	\$ 194,233	\$ 194,233	\$ 194,233
165 Vehicles & Other Work Equipment	6.67%	\$ 265,884	\$ 265,885	\$ 265,885	\$ 265,885	\$ 432,365	\$ 605,472	\$ 1,234,795	\$ 1,234,795
166 Other Property	3.33%	\$ 63,144	\$ 63,144	\$ 63,144	\$ 63,144	\$ 158,034	\$ 519,522	\$ 1,168,167	\$ 1,168,167
TRUNK LINES Subtotal		\$ 220,009,451	\$ 216,079,837	\$ 239,433,525	\$ 242,411,472	\$ 245,489,147	\$ 248,721,384	\$ 255,176,622	\$ 255,176,622
<b>TOTAL</b>		\$ 230,356,973	\$ 226,483,115	\$ 249,836,803	\$ 252,814,750	\$ 255,892,425	\$ 259,124,662	\$ 265,579,900	\$ 265,579,900

**Composite Depreciation Rate**

- 1/ 2016 CPIS Balances from 2017 Rate Case Filing, 2017 forward CPIS Balances from Company Records  
2/ Depreciation Expense = Average CPIS Balance \* Depreciation Rate



Carrier Property Account	Depreciation Rate	2017	2018	2019	2020	Jan-May 2021	Base Period	Test Period
		Depreciation Expense						
		2/						
101 Land	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
102 Right of Way	2.81%	\$ 8,070	\$ 8,071	\$ 8,071	\$ 8,071	\$ 3,363	\$ 8,071	\$ 8,071
103 Line Pipe	3.12%	\$ 79,969	\$ 79,969	\$ 79,969	\$ 79,969	\$ 33,320	\$ 79,969	\$ 79,969
104 Line Pipe Fittings	3.14%	\$ 17,704	\$ 17,718	\$ 17,718	\$ 17,718	\$ 7,382	\$ 17,718	\$ 17,718
105 Pipeline Construction	2.84%	\$ 117,162	\$ 117,164	\$ 117,164	\$ 117,164	\$ 48,818	\$ 117,164	\$ 117,164
106 Buildings	2.77%	\$ 1,997	\$ 2,029	\$ 2,029	\$ 2,029	\$ 845	\$ 2,029	\$ 2,029
107 Boilers	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
108 Pumping Equipments	3.09%	\$ 32,585	\$ 33,048	\$ 33,048	\$ 33,048	\$ 13,770	\$ 33,048	\$ 33,048
109 Machine Tools and Machinery	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
110 Other Station Equipment	2.95%	\$ 23,244	\$ 23,527	\$ 23,527	\$ 23,527	\$ 9,803	\$ 23,527	\$ 23,527
111 Oil Tanks	2.59%	\$ 14,255	\$ 14,255	\$ 14,255	\$ 14,255	\$ 5,940	\$ 14,255	\$ 14,255
112 Delivery Facilities	3.43%	\$ 3,319	\$ 3,319	\$ 3,319	\$ 3,319	\$ 1,383	\$ 3,319	\$ 3,319
113 Communication Systems	3.86%	\$ 10,423	\$ 10,484	\$ 10,484	\$ 10,484	\$ 4,368	\$ 10,484	\$ 10,484
114 Office Furniture and Fixtures	5.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
115 Vehicles & Other Work Equipment	6.67%	\$ 277	\$ 277	\$ 277	\$ 277	\$ 115	\$ 277	\$ 277
116 Other Property	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GATHERING LINES Subtotal		\$ 309,004	\$ 309,861	\$ 309,861	\$ 309,861	\$ 129,109	\$ 309,861	\$ 309,861
<b>TRUNK LINES</b>								
151 Land	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
152 Right of Way	1.97%	\$ 71,596	\$ 72,441	\$ 73,285	\$ 73,285	\$ 30,535	\$ 73,285	\$ 73,285
153 Line Pipe	3.00%	\$ 627,831	\$ 629,359	\$ 653,328	\$ 667,617	\$ 280,808	\$ 700,612	\$ 814,287
154 Line Pipe Fittings	2.65%	\$ 366,066	\$ 373,815	\$ 384,192	\$ 385,344	\$ 161,054	\$ 388,038	\$ 388,942
155 Pipeline Construction	2.58%	\$ 2,582,542	\$ 2,825,325	\$ 3,095,179	\$ 3,096,082	\$ 1,290,034	\$ 3,096,082	\$ 3,096,082
156 Buildings	2.53%	\$ 54,847	\$ 54,362	\$ 55,410	\$ 56,457	\$ 23,524	\$ 56,457	\$ 56,457
157 Boilers	3.00%	\$ 12,800	\$ 12,800	\$ 12,800	\$ 12,800	\$ 5,333	\$ 12,800	\$ 12,800
158 Pumping Equipments	2.70%	\$ 232,975	\$ 234,676	\$ 234,676	\$ 234,676	\$ 97,782	\$ 235,878	\$ 247,462
159 Machine Tools and Machinery	4.28%	\$ 4,851	\$ 4,851	\$ 4,851	\$ 4,851	\$ 2,021	\$ 4,851	\$ 4,851
160 Other Station Equipment	2.66%	\$ 1,054,815	\$ 1,043,557	\$ 1,061,541	\$ 1,077,818	\$ 450,902	\$ 1,084,453	\$ 1,088,222
161 Oil Tanks	2.67%	\$ 672,577	\$ 681,374	\$ 689,371	\$ 693,761	\$ 289,483	\$ 698,793	\$ 748,077
162 Delivery Facilities	2.58%	\$ 31,285	\$ 31,285	\$ 35,308	\$ 39,331	\$ 16,388	\$ 39,331	\$ 39,331
163 Communication Systems	3.74%	\$ 35,056	\$ 33,807	\$ 33,807	\$ 62,816	\$ 39,187	\$ 98,685	\$ 102,695
164 Office Furniture and Fixtures	5.00%	\$ 9,764	\$ 9,712	\$ 9,712	\$ 9,712	\$ 4,047	\$ 9,712	\$ 9,712
165 Vehicles & Other Work Equipment	6.67%	\$ 17,734	\$ 17,734	\$ 17,734	\$ 23,287	\$ 14,422	\$ 40,385	\$ 82,361
166 Other Property	3.33%	\$ 2,103	\$ 2,103	\$ 2,103	\$ 3,683	\$ 3,694	\$ 43,762	\$ 38,900
TRUNK LINES Subtotal		\$ 5,776,841	\$ 6,027,199	\$ 6,363,295	\$ 6,441,519	\$ 2,709,213	\$ 6,583,123	\$ 6,803,463
<b>TOTAL</b>		\$ 6,085,845	\$ 6,337,060	\$ 6,673,156	\$ 6,751,379	\$ 2,838,322	\$ 6,892,983	\$ 7,113,324
<b>Composite Depreciation Rate</b>		2.67%	2.67%	2.67%	2.67%	1.11%	2.65%	2.70%

1/ 2016 CPIS Balances from 2017 Rate Case Filing. 2017 for  
2/ Depreciation Expense = Average CPIS Balance \* Depreciat

## 2023 COS Rate Filing

## Volumes and Revenues for 2022

Line	Receipt Location	Delivery Location	Effective Tariffs			Transportation Volumes	Transportation Volumes 4/	Transportation Revenues @ Effective Rates
			Number	Pipeline Rate	Truck Rack Charge			
				\$/Bbl	\$/Bbl			
1	Coalinga Station 1/	Shell Refinery	Cal. P.U.C. No. 2.14.0	\$1.771		20,722,931	5,147,368,947	\$36,700,312
2	Coalinga Station 2/	Valero Refinery	Cal. P.U.C. No. 2.14.0	\$1.771		7,901,817	2,083,630,083	\$13,994,118
3	Coalinga Station 3/	Tesoro Refinery	Cal. P.U.C. No. 2.14.0	\$1.771		-	-	\$0
4	Station 36	San Joaquin Refinery	Cal. P.U.C. No. 2.14.0	\$0.378		3,652,980	36,054,910	\$1,380,826
5	Vine Hill Station	Shell Refinery	Cal. P.U.C. No. 2.14.0	\$0.250		-	-	\$0
6	Pipeline Transportation Total					32,277,728	7,267,053,940	\$52,075,256
7	Truck Rack				\$0.134	1,560,571		\$209,117
8	CAL. P.U.C. Fees (0.034% Pipeline and Truck Rack Revenues)							\$17,777
9	Allowance Oil Revenue							\$5,844,226
10	Total Revenues							\$58,146,375

1/ Presents volumes delivered from various receipt locations on SPB - 20" to Shell Refinery

2/ Presents volumes delivered from various receipt locations on SPB - 20" to Valero Refinery

3/ Presents volumes delivered from various receipt locations on SPB - 20" to Tesoro Refinery

4/ Calculated based on actual volumes and mileage for individual movements

### Volumes and Revenues for the Base and Test Period

Line	Receipt Location	Delivery Location	Effective Tariff Rate	[a]	[b]	[c]			[d]	[e]	[f]	[g]	[h]	[i]
						Transportation Volumes								
						Normalizing Adjustments	Base Period	Test Period Adjustments						
			\$/Bbl	Bbls	Bbls	Bbls	Bbls	Bbls	Test Period	Test Period	Base Period	Test Period	Base Period	Test Period
1	Coalinga Station 1/	Shell Refinery	\$1.771	20,722,931	(2,225,502)	18,497,430	(146,565)	18,350,864	4,558,237,252	\$32,758,948	\$32,409,380			
2	Coalinga Station 2/	Valero Refinery	\$1.771	7,901,817	(1,972,947)	5,928,870	(46,978)	5,881,892	1,550,975,303	\$10,500,029	\$10,416,831			
3	Coalinga Station 3/	Tesoro Refinery	\$1.771	-	-	-	-	-	-	\$0	\$0			
4	Station 36	San Joaquin Refinery	\$0.378	3,652,980	-	3,652,980	(28,126)	3,624,854	35,777,308	\$1,380,826	\$1,370,195			
5	Vine Hill Station	Shell Refinery	\$0.250	-	-	-	-	-	-	\$0	\$0			
6	Pipeline Transportation Total			32,277,728	(4,198,449)	28,079,279	(221,669)	27,857,610	6,144,989,863	\$44,639,803	\$44,286,406			
7	Truck Rack		\$0.134	1,560,571	-	1,560,571	-	1,346,866		\$209,117	\$180,480			
8	CAL P.U.C. Fees (0.034% Pipeline and Truck Rack Revenues)							\$15,119		\$15,249	\$15,119			
9	Allowance Oil Revenue 5/							\$4,385,761		\$4,385,761	\$2,818,806			
10	Total Revenues									\$49,249,929	\$47,300,812			

- 1/ Presents volumes delivered from various receipt locations on SPB - 20<sup>th</sup> to Shell Refinery
- 2/ Presents volumes delivered from various receipt locations on SPB - 20<sup>th</sup> to Valero Refinery
- 3/ Presents volumes delivered from various receipt locations on SPB - 20<sup>th</sup> to Tesoro Refinery
- 4/ Calculated based on actual volumes and mileage for individual movements
- 5/ Base and Test Period revenues are proportional to respective volumes, including those blended in from KLM

**DCF Method**  
**Market Data For The Six-Month Period Through December 31, 2022**  
**Crimson CPUC Proxy Group**

Ln.	Ticker	Company	6-Mo. Avg Price Dec.-May 2022	Distribution	Distribution Yield	I/B/E/S Growth	GDP Growth Forecast	Wtd. Avg. Growth	6-mo Avg. Yield x (1+1/2 IBES g)	Yield plus Growth Staff Exh. S-25 p.1
1	MMP	Magellan Midstream Partners, L.P.	50.39	4.15	8.24%	5.45%	2.12%	4.34%	8.46%	12.81%
2	MPLX	MPLX LP	31.95	3.10	9.70%	3.66%	2.12%	3.15%	9.88%	13.03%
3	EPD	Enterprise Products Partners, L.P.	25.02	1.90	7.59%	8.60%	2.12%	6.44%	7.92%	14.36%
4	PAA	Plains All American Pipeline, L.P.	11.45	0.87	7.62%	8.70%	2.12%	6.51%	7.95%	14.46%
5	ENB.TO	Enbridge	54.06	3.44	6.36%	3.70%	4.25%	3.88%	6.48%	10.36%
6	NS	NuStar Energy, L.P.	15.26	1.60	10.48%	99.40%	2.12%	66.97%	15.69%	82.67%
7		<b>Median</b>								<b>13.70%</b>

**CAPM Method**  
**Market Through May 31, 2021. Value Line Report Dated November 25, 2022**

Ln.	Ticker	Company	Value Line Beta	Risk- free Rate	DCF S&P 500	Market Risk Premium	Beta x Risk Premium	CAPM Cost of Equity	Market Cap \$(MM)	Size Premium	Size-Adjusted CAPM
8	MMP	Magellan Midstream Partners, L.P.	1.10	3.6%	10.89%	7.32%	8.05%	11.62%	10,900	0.55%	12.2%
9	MPLX	MPLX LP	1.00	3.6%	10.89%	7.32%	7.32%	10.89%	33,700	0.43%	11.3%
10	EPD	Enterprise Products Partners, L.P.	1.05	3.6%	10.89%	7.32%	7.68%	11.26%	54,200	-0.22%	11.0%
11	PAA	Plains All American Pipeline, L.P.	1.45	3.6%	10.89%	7.32%	10.61%	14.18%	8,500	0.55%	14.7%
12	ENB.TO	Enbridge	0.85	3.6%	10.89%	7.32%	6.22%	9.79%	108,000	-0.22%	9.6%
13	NS	NuStar Energy, L.P.	1.25	3.6%	10.89%	7.32%	9.15%	12.72%	1,700	1.34%	14.1%
14		<b>Median</b>									<b>11.75%</b>

**ROE Nominal - Composite**

Ln.	Method	ROE Nominal
15	DCF Method	13.70%
16	CAPM Method	11.75%
17	ROE Nominal - Composite	<b>12.72%</b>
18	Risk Adjustment	<b>1.00%</b>
19	ROE Nominal - Composite Risk Adjusted	<b>13.72%</b>